THE

Gulstonian Lectures

ON

EPILEPSY.

Delivered before the Royal College of Physicians,

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LECTURE I.—PART II.

THE next point which demands consideration is how far age and sex influence the occurrence of the hystero-epileptic or co-ordinated forms of convulsion. We have seen that, of 1000 cases in which the form of convulsion could be ascertained, it was co-ordinated in 185, or 18½ per cent. At every age the proportion of females is greater than of males. Under ten, these cases constitute 15 per cent. of the male and 18 per cent. of the female cases. Between ten and twenty the difference is, as might be expected, much greater. They constitute 14 per cent. of the male, and no less than 26 per cent. of the female cases. Between twenty and thirty the percentage of the males remains the same (14), and that of the females falls slightly (to 21). Between thirty and forty, the male cases with hystero-epileptic symptoms fall to 12 per cent., while the females present a slight rise and constitute 24 per cent. In the male cases commencing over forty none of this character occurred; and in women, although 29 cases of the series commenced over forty, only 1 presented these symptoms. Thus cases with hystero-epileptic symptoms commence almost exclusively under forty. In males, they bear at each age nearly the same proportion to the cases of pure epilepsy, decreasing very slightly from a maximum in childhood to a minimum in middle life. In women their minimum is in the first decade; their maximum is in the second; and the proportion after adolescence remains nearly double that of males during the period in which they occur. I think, however, that some surprise will be felt at the fact shown by these figures—which my actual observation of attacks fully confirms—that, even up to the fourth decade of life, one-third of the cases presenting hystero-epileptic phenomena occur in males.

I pass next to consider the information which this series of cases affords as to the exciting causes of epilepsy. The first point which demands attention is the causation of the large number of cases which begin in the first three years of life. Of these, 180 in number, no information was forthcoming in about one-third. In 24 cases, although information was obtained, no cause could be ascertained. In 97 cases, however, a cause for the first fit was assigned. In 2 it was exposure to the sun; in 1 ascarides; in 7 an acute disease; in 8 a fall; and in 8 the first fit occurred soon after birth, the labour in several of these cases having been difficult, and in some the forceps employed. In the remaining 72 cases, 33 males and 39 females, the first fits occurred during dentition, and were attributed to teething. The percentage of neurotic heredity in these cases was nearly the same as for the whole of life—34 per cent.

Thus nearly two-thirds of the cases beginning in infancy, the conditions of origin of which could be ascertained, arose from the so-called dentition convulsions. It seems legitimate to ascribe to the same cause a similar proportion of the cases respecting which no information was forthcoming. If so, we have a total number of cases due to this cause which constitutes 7 per cent. of all the cases investigated.

Few persons who have attended closely to the diseases of children can fail to be convinced of the truth of the opinion long ago urged by Sir William Jenner, and now widely accepted, that almost all convulsions associated with dentition are really due to the constitutional condition of retarded development, which we call rickets, to the irritability of the nervous system which accompanies this condition. The further details of the cases I am considering fully confirm this, for in a large number there was a history of late teething, late walking, and in many of crooked limbs.

Even these facts probably do not represent fully the influence of rickets in the production of epilepsy. In many of the cases just described, the course of the attacks was continuous from infancy to adult life. In others, however, there were intermissions, especially during the period of childhood. In several, for instance, the fits ceased at seven, to recommence at ten or eleven years. Now, in 27 other cases which commenced after the period of childhood was over, repeated convulsions had occurred during the first dentition, accompanied in many with other signs of rickets. It seems reasonable to ascribe to these convulsions of infancy a share in predisposing to the convulsions of later life, and the addition of these cases raises the number, in which a causal influence may with probability be ascribed to rickets, to nearly 10 per cent. of the whole.

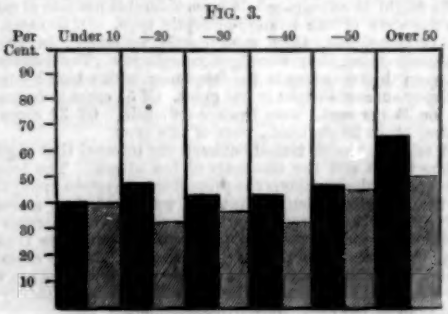
Whether rickets is or is not entirely preventable, there can be little doubt that in the degree in which it leads to convulsions it is always preventable by proper attention to the diet and hygiene of infancy. These facts, therefore, suggest that a considerable proportion of the cases of epilepsy are really within the range of preventable diseases. They suggest also that inherited taint exerts the same influence here as at other periods of life, predisposing to the occurrence of convulsions in backward children, and to the persistence of the fits, and that the management of children with such inherited taint should be a subject of extreme care.

The statements made by patients as to the causes of their fits have of necessity to be received with caution, and the facts carefully investigated. An occurrence so striking as a fit is naturally assumed to be due to some cause at least discoverable, and so is often attributed to a remote and improbable antecedent. Of 1150 cases in which this point was noted, a reasonable cause for the first fit was given in 428, or 37 per cent., and in the remainder no probable cause could be ascertained. From this series the cases distinctly originating in dentition convulsions are excluded.

An exciting cause is met with in males much more frequently than in females: in 44 per cent. of men (235 out of 537 cases), and in only 31 per cent. of women (193 out of 616 cases)—a difference between the sexes of 13 per cent. This can scarcely be accounted for by greater exposure to exciting causes, since some of these act more on the female sex; it seems to indicate a greater predisposition on the part of women.

If we examine the proportion of cases in which an exciting cause can be traced in the different periods of life, we find that under ten it is nearly the same for both sexes (males 41, females 40 per cent.) From ten to twenty there is a great difference between the sexes, excitants being traceable in 19 per cent. more males than females (males 47, females 32 per cent.) In the next two decades, 20—40, the percentage in men continues the same (at 42 per cent.); but in women it rises (to 35) in the first, and falls (to 32) in the second. In the cases which occur over forty years of age the percentage in each sex is about equal (40); but in the male cases commencing over fifty, an exciting cause could be traced in as high a proportion as two-thirds. Thus the most striking peculiarity is the large proportion of cases which commence in women between ten and forty years of age without any discoverable exciting cause to which they can be ascribed.

FIG. 3.



Percentage of 1150 cases in which an exciting cause could be traced in each decennial period of life.

Of all the immediate causes of epilepsy the most potent are psychical—fright, excitement, anxiety. To these were ascribed 157 cases, more than one-third of those in which a

cause was given and one-seventh of the whole series. Of the three forms of emotion, fright takes the first place with 119 cases, 10 per cent. of the whole. The relation of this cause to age is, however, very distinct. It is effective chiefly in early life, when emotion is the most ready, and is most powerful at the transition from childhood to adult life, while after middle life it is almost inactive. Of the 119 cases only 3 commenced after thirty years of age, and 100 commenced under twenty. Of these, the majority, 70, commenced between ten and twenty, only 30 cases under ten. The female sex is notoriously the more emotional, and accordingly the disease, as Dr. Sieveking and others have pointed out, resulted from fright in a larger proportion of females than of males, although the difference is, perhaps, less than might be expected—71 females and 48 males, 60 and 40 per cent. respectively. It is notorious also that the difference between the sexes in emotionality increases as life advances. In childhood one sex is as emotional as the other, but with puberty men become far less emotional than women. The influence of fright as a cause of epilepsy is in strict harmony with this fact. Under ten years of age, the sexes suffer equally. Between ten and twenty the males are to the females as 3 to 4; between twenty and thirty as 3 to 13, and over thirty the only cases due to this cause occurred in women. After seventeen only 3 cases occurred in men, while 20 occurred in women.

The influence of this cause is accurately recognised in popular phraseology, and is easily comprehensible when we consider how powerfully fright affects the nerve-centres. The stimulation of the motor centres shows itself in the sudden muscular actions, such as the start of alarm, which, no doubt, originates in the need for immediate action, which danger often entails. The tremor, which often persists, indicates the enduring disturbance of the nerve-centres. In the organic nerves the vaso-motor centre is first stimulated and then inhibited, the sphincter centres are released from control, the sweat nerves are excited, and the heart's action is accelerated, perhaps, by inhibition of the vagus, and the last effect is the most constant, the most ready.

The exact form of fright varied, of course, in different cases, but the list teaches many lessons. In no less than 8 cases the cause was some stupid practical joke—as a pretended ghost. In 2 cases children were shut up in dark cupboards. In 5 cases the fright was from an alarm of fire, in 6 from burglars. In 6 cases the patient had watched other persons in fits. Three resulted from alarm during severe thunderstorms. One case was that of a soldier who had his first fit a few hours after being terrified, while on sentry duty, by the unexpected appearance of some goats.

Of 76 cases in which the interval between the fright and the fit was noted the fit occurred immediately in 28, or one-third; within a few hours in 16. The interval was between a day and a week in 19, and it was more than a week in 13.

As might be anticipated, in a considerable number of cases the fits were of the hystero-epileptic type. Of 90 cases, in 61, or two-thirds, they were purely epileptic; in 29, or about one-third, they were hystero-epileptic. The difference between the two sexes in the frequency with which hystero-epilepsy succeeds fright is not great. Of 51 cases in females, 18, or 35 per cent., were hystero-epileptic. Of 39 cases in males, 11, or 28 per cent., were of this type.

A relation can be traced between the interval that elapses before the fit and the character of the attack. The longer the interval the smaller is the proportion of hystero-epileptics. In the cases in which the interval was more than a week, only 18 per cent. were of this character; in the cases in which the interval was less than a week, but more than a day, the percentage of this form was 21. In the cases in which the interval was only a few hours the percentage was 25, while in those in which the fit occurred immediately no less than 57 per cent. were hystero-epileptic.

Other forms of sudden emotional excitement caused the first fit in 19 cases—9 males and 10 females; and these cases also occurred during the emotional period of life, under thirty years of age.

Anxiety was the only traceable cause in 29 cases, and in these males preponderated, 16 males to 13 females, and 7 occurred over thirty years, 6 of these being men.

Next, in numerical importance, among the exciting causes of epilepsy are traumatic influences, blows and falls on the head. To these, after the elimination of doubtful instances, 65 cases were due. A third (21 cases) occurred under ten years, rather more than a third (25 cases) between ten and twenty. Males are affected by this cause more than females, the numbers being 39 to 26. This is clearly due to the risks of occupation, for in the cases commencing before ten years the females were in excess. Between ten and forty the male cases in each decennium were rather more than twice the number of the females. Over forty the only cases were in men.

Hystero-epilepsy resulted from a traumatic cause in only a small number of cases—6 out of 44; and in estimating the significance of these it must be remembered that traumatic causes often involve intense emotional disturbance.

In two-thirds of the cases the injury was a fall on the head, in one-third it was a blow on the head. In most of the cases the patient was stunned for a time, but in only a fifth (8 cases) did the first fit occur immediately, in the rest an interval elapsed; in one-third of the cases the interval between the injury and the fit was more than a day and less than a week; in another fifth the interval was between a week and a month, and in about the same proportion the interval was more than a month.

Exposure to the sun was given as the cause of the first fit in a considerable number of instances, and in 27 it seemed probable that the statement was correct. From this cause, as may be expected, males, from their greater exposure, suffer most: 20 were males, and only 7 females. The cases were pretty equally distributed through life, but the cases in females were relatively most numerous in childhood, and decreased in adult life, to cease at thirty. The form of convulsion was almost always pure epilepsy, only one case presented hystero-epileptic symptoms. In 10 of the cases there was a distinct attack of sunstroke, occurring, in 6, in the tropics. In 10 the fit occurred immediately; in several others in which an interval elapsed, this was marked by some form of nerve disturbance, such as tremor.

An acute disease was the apparent cause of the first fit in 37 cases (14 males and 23 females), and in more than half (19 cases) the disease was scarlet fever; in a quarter of the cases (9) it was measles; in 5 cases it was continued fever, called typhus, typhoid, or low fever; in 1 case it was rheumatic fever; and in 1 a severe attack of diarrhœa.

The remarkable influence of scarlet fever in the causation of epilepsy demands further consideration. The cases due to this all commenced during early life, under seventeen. It may be thought that the first fits in these cases were due to uræmic poisoning, but this is not supported by the particulars ascertained regarding 14 cases. It is true that in 3 of these all that could be learned was that the first fit occurred during scarlet fever, accompanied with dropsy, and in 2 others that the fits occurred after an attack of scarlatinal dropsy was over. But in 2 other cases in which the scarlet fever was succeeded by dropsy, the first fit occurred after the fever, before the dropsy. In 6 cases there was no dropsy; in 2 of these the first fit occurred after the fever was over, in 1 during convalescence, and in 1 a month later. In 3 cases the first fit occurred during the height of the fever, and in 1 convulsions ushered in the disease, persisted throughout the attack, and continued afterwards as permanent epilepsy. In only 1 case did ear disease also result from the fever. The urine was examined in most cases, but no albumen was found.

These facts suggest that the first fits were due to some peculiar effect of the scarlet-fever poison upon the nervous system. It may be remembered that the scarlet-fever poison has a very widespread action in the system, and that, after scarlet fever, optic neuritis, leading to subsequent atrophy, may occur, without renal or coarse cerebral disease.

Intestinal worms rank low as a cause of persistent epilepsy, but were noted in 6 cases, the convulsions continuing long after the worms had been expelled. In 5 cases the first attack was attributed to digestive derangement. In 1 case asphyxia, and in 9 immersion in the water, caused the first fit.

Certain toxæmic influences were the apparent cause of the disease in several cases. Of these, chronic alcoholism was the cause in a comparatively small number—13 cases only. In some the first fit occurred during intoxication, and in a few the attacks recurred after each alcoholic excess.

Six patients were the subjects of chronic lead-poisoning. In 2 of these there was also chronic renal disease. In 1 of the others the epilepsy had existed from infancy, but became much more severe when the plumbism was developed. In the remaining 3 the lead-poisoning was the apparent cause of the attacks, which resembled, in character and course, those of idiopathic epilepsy. It is well known that acute lead-poisoning may be accompanied by convulsions;

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that chronic poisoning may cause chronic convulsions precisely like those of ordinary epilepsy, has been pointed out by others, but is not, I think, generally known. The list of nervous disturbances which may result from lead is a long one, and includes, as cases I have seen testify, acute and chronic mental derangement, neuralgia, brachial spasm, as well as palsy, and muscular wasting and optic neuritis. It is known that lead is to be found after death in the brain in considerable quantity.

I have mentioned that in 2 of the cases of lead-poisoning there was also consecutive renal disease. In 2 other cases of chronic renal disease convulsive attacks, resembling perfectly idiopathic epilepsy, brought the patients under treatment. In 1 the absence of any coarse changes in the brain was proved post mortem. It appears, therefore, that such convulsive attacks may occur and recur for months, without other sign of uræmic mischief. Several cases in which chronic mental derangement resulted from Bright's disease have also come under my notice.

I have met with no case which suggests that tobacco-smoking exerts any influence in the production of epilepsy; but in 1 case the fits were apparently due to the patient, a lad, having shortly before commenced working in a tobacco factory, where his occupation caused frequent nausea. In 1 case the first fit occurred after the administration of chloroform, and, in 1, attacks, which had ceased for many years, recurred after the inhalation of nitrous oxide.

Of sexual processes, retarded or absent menstruation coincided with the first fits in a large number of the cases which commenced in girls between fourteen and seventeen, but the difficulty in determining the exact causal relationship between the two conditions is very great. Epilepsy once set up in such cases, the subsequent establishment of regular menstruation appears to exercise very little influence upon the fits. In boys who are epileptic masturbation is unquestionably common, but here again it is most difficult to decide to what degree it can be regarded as a cause of the disease, and it was distinctly the cause in only a small number of cases. The first fit occurred, in 7 cases, during pregnancy, without other obvious cause, and in 5 cases the disease commenced after parturition.

No facts which have come under my notice suggest that acquired syphilis is a cause of idiopathic epilepsy.

There remain for consideration two conditions, occasionally associated with epilepsy, in some cases causally, in others probably only by coincidence, or as the effects of a common cause—these are heart disease and chorea.

An abnormal condition of the heart was noted in 93 cases, but this does not represent the proportion of the whole in which abnormality existed, since in many its condition was not noted. I have, however, rarely failed to examine the heart in epileptics, and I think that the proportion of cases of valvular disease is not far below the mark. In 8 cases there was extreme frequency of action; in 9 there was irregularity; in 13, all young persons, there was reduplication of the first sound. In 30 cases there was valvular disease, mitral regurgitation in 20, mitral constriction in 7, aortic regurgitation in 3, and aortic constriction in 1. There was obvious dilatation, without valve disease, in 20, and considerable hypertrophy, without renal disease, in 2. The cases of irregularity and reduplication were all observed within a comparatively short space of time, and I am sure that had my attention been earlier directed to their frequency I should have found them in a larger number of cases. In a few cases it seemed that the heart disease and epilepsy were in accidental association. In some cases the cardiac condition, especially simple dilatation and reduplication of the first sound, may have been a consequence of the repeated strain to which the heart had been subjected during the attacks. But in other cases, especially of valvular disease, there was reason to believe that the heart disease existed before the epilepsy, and in many there was no other etiological condition to which it could be ascribed.

In 20 cases of epilepsy the patients had also suffered from chorea. The relation between the two diseases was as follows. In 8 cases epilepsy existed before the chorea. In 12 the chorea occurred first; in 4 of these the fits began at the time of the chorea and persisted afterwards. In only 2 of these was there heart disease. In 5 cases the fits occurred long after the chorea, the interval being four, six, twenty-seven, thirty, and forty years respectively. In 1 case peculiar choreic convulsions occurred at the height of the chorea, but passed away as the disease lessened, and did not recur. It seems probable in the cases in which the fits immediately succeeded the chorea, and possible in the cases in which an interval elapsed, that the impaired nutrition of the motor centres during the chorea may have left a predisposition to further disturbance under the action of some other exciting cause.

In the next lecture I propose to consider the illustrations presented by the cases of some of the symptoms of the attacks.

Lectures
ON SOME
RECENT INVESTIGATIONS
INTO THE
PATHOLOGY OF INFECTIVE AND CONTAGIOUS DISEASES.

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LECTURE I.—PART II.

THE hypotheses as to the nature of the contagia in these two classes of disease—infective and specific—have been numerous. In the case of the infective diseases it is natural to look to the process of decomposition, and to seek either in the products or the agents of the decomposition of animal fluids or tissues the source of contagion. But, in spite of recent discoveries, opinions are divided as to whether there is any organised element having an existence independent of the putrefactive process, which is the agent both of the decomposition and of the contagium.

With regard to the specific contagia, the hypotheses most commonly entertained may be classified in three main groups, and expressed in the following way:—(1) That the contagium of any specific disease consists of some protoplasmic constituent of the body possessing the power, when transferred to the body of another individual, of setting up a similar disease process; or (2), That an unorganised ferment produced in the disease is transferred, and sets up the vital change; or (3), That the contagium is some organism having an existence independent of the body, but capable of growing and multiplying within it, and by this growth and reproduction giving rise in some way to the phenomena of the disease. To the first and third of these hypotheses the term "germ theory" is equally applicable; whilst to the latter alone is usually limited the term "theory of the *contagium vivum*," or *contagium animatum*.

In considering these hypotheses, we must bear in mind that the contagia are not merely specific, in the sense of giving rise each to its peculiar series of changes when introduced into the body—changes which may be likened to those caused by a poison or an unorganised ferment, such as diastase or ptyaline,—but that each contagium is reproduced in enormous amount in every case of infection, and that an extremely minute quantity introduced into another living body will again give rise to similar phenomena with like self-multiplication; and this cycle of change may be continued in an indefinite series under the most varying conditions. From what little we do know of the life history of contagia, especially as to their cycle of development, their reproduction and enormous self-multiplication within the body, the minute quantity needed to give rise to infection, and the absence of relation between quantity and effect, the capacity in many cases of long dormancy and resistance to some chemical and thermal influences, most pathologists have been led to reject the unorganised ferment theory as not sufficiently supported by known facts, and to accept one of the other hypotheses in preference.

To state these more fully, the first hypothesis consists in the view that a particular tissue or element of the organism having undergone some particular change or vital reaction

is capable of impressing upon another similar organism the tendency to a like vital change; in fact that a communication of vital energy analogous to the transmission of molecular force is the essential factor in contagion. In favour of this view is what we see in the propagation of morbid growths, or even, I might say, of normal growths in the body. For every specialised tissue element not only reproduces its like under normal conditions, but we have strong reasons to believe that the leucocytes grow into specialised elements under the influence of some of the tissues into which they enter, which thus assimilate them. In the same way morbid tissues and morbid processes repeat themselves under favouring conditions, bending the tissue elements and the nutritive processes to their own likeness, and in so doing often display a selective tendency for tissues analogous to those in which they have arisen.

The other hypothesis regards the essential contagium as consisting in some organism foreign to the body, and possessing an independent existence, which has the power of self-multiplication within the body by nutriment derived from it, and of propagating its species further by seeds or germs given off from the body. During this process of self-multiplication, changes are produced in the body which we know as febrile and specific symptoms and lesions, which together make up the specific disease, and which upon this hypothesis may be the direct consequence of the self-multiplication of the foreign organism, or of some special fermentative change produced by it in the tissues and fluids of the body itself. This latter hypothesis is equivalent to that of the contagium vivum or contagium animatum, as defined by Dr. Burdon-Sanderson;[1] and although it is not equivalent to a bacterial theory of contagion (for the organisms on which the disease depended might be of some other nature than bacteria), yet our present knowledge on the subject points towards the view that if microphytes constitute the contagia, they are probably bacterial.

I need not enter further into the discussion of this question, especially as it has been so ably dealt with by many writers. I may refer especially to the writings of Nägeli, Sir Thomas Watson, Professor Lister, Dr. Maclagan, and others. But it is well known that there is at the present time a very strong tendency to the view that bacteria or some allied lower organisms are intimately related to contagion, either as the actual contagium, or as carriers of it, or as an essential condition of its potency. The precise relation of bacteria to contagion has long been a favourite subject of speculation, and every new fact ascertained with regard to their development seems to be hailed or rejected by some persons, accordingly as it appears to favour or oppose some theory upon this subject. At present, therefore, I shall content myself with pointing out that in what we now know of the life history of certain bacterial forms there is some presumptive evidence in favour of their being the actual contagia in certain diseases. For, in the first place, of all known organisms bacteria most closely conform in their life conditions to what we know of specific contagia, as to nutrition, rapidity of multiplication, powers of latency, and retention of vitality in the form of spores. Indeed, recent discoveries as to the life conditions and cyclic changes of bacilli show a most striking analogy with certain contagia. And, secondly, in certain diseases, notably splenic fever and contagious pneumo-enteritis of swine, it may be regarded as conclusively proved that the contagium is a bacillus, and we have thus some positive evidence in favour of the hypothesis.

Turning now to the subject of bacteria, we find that, important as are the discoveries which have been made, we must be content with a knowledge as to their mutual relations, life history, and variations under cultivation, which is, perhaps, more confusing and difficult than the subject of contagion itself. In the present transitional state of our knowledge we must anticipate conflicting views, and it need hardly surprise us that diametrically opposite opinions are entertained by those whose special study and acquaintance with the subject lend weight to their authority. Let me mention one or two of the more important of these disputed points. Are there a multitude of different bacterial forms, each separate from the other in its origin, its action, and its form; or, rather, its life history? Or are all the variations in form and size, in development, and, what is more important, in reaction, merely phases in the development of one protean form? Does every change in condition of life, every fermentative process, lead to a modification of this original form, and the acquisition of special powers of reaction, which are capable of transmission by heredity, so long as favouring conditions exist, but which die away when those conditions cease, to be called again into existence and potency when like conditions recur. In favour of some such view I may quote two distinguished authorities. Naëgeli, one of the earliest workers in this field, has said that he has never seen reason to believe in the existence of more than two kinds of bacteria. Professor Ray Lankester holds, I believe, the view that only bacilli are separate from common bacteria, the latter being mutable with varying conditions. As a contrast to this I may mention that Koch[2] believes that all bacteria (pathological at any rate) are bacilli, holding firmly, however, that there are a large number of absolutely distinct pathological bacteria, not only distinguishable by their size and form, but by their special physiological and pathological reactions. Professor Cossar Ewart has done good work in showing how closely the several morphological varieties or classes may approach one another in certain stages of their existence.

I might quote many distinguished names in support of one or other of these more or less modified views, but time forbids. I believe that for practical purposes it is well that we should hold provisionally, as a probable and workable hypothesis, that there are many distinct kinds of bacteria, that they are probably distinguishable either by their physical characters or their vital changes, or by some power which they possess. And we may leave the solution of the metaphysical question, whether they originated from some common stock, and have merely acquired certain potencies and forms, until we know more of their actual relation to the processes in which they are concerned.

Seeing, then, how important is a knowledge of the various forms and phases of bacteria, in order to a comprehension of their relation to putrefactive and contagious processes, I trust I may be excused if I venture to give a brief and elementary account of some of the more important of the common forms, which may be of use to those who have not specially studied the subject; and in doing so I shall refer almost exclusively to such facts as have some probable bearing on the study of disease.

Disregarding for the moment the nature, habitat, size, and so on, of bacteria, we may roughly divide them, following Cohn, into spheroidal bacteria, typified by micrococcus; rod-shaped bacteria, of which the type is bacterium termo; long-rod bacteria or bacilli; and spiral or twisted bacteria, of which the type is spirillum. We now know that in the course of development of bacteria and bacilli, short and long-rod forms, and also more or less spherical forms, are produced, so that mere form in one stage does not serve as a ground of distinction; but we have as yet reason to doubt whether some bacteria ever pass beyond the spherical stage, whilst others do not appear to develop into elongated rods; others, again, habitually assume rod or spiral forms.

It would occupy far too much time to enter with any detail into the various researches into the mode of development of bacteria, or even to mention the numerous workers in this field. The observations of Ehrenberg, Nägeli,[3] Cohn,[4] Pasteur, Klebs,[5] Billroth,[6] Dallinger,[7] Huxley, Sanderson, Lister, Ray Lankester,[8] Koch,[9] Klein,[10] Cossar Ewart,[11] Lewis,[12] and many others, are familiar to all who

[1] Dr. Sanderson has thus expressed this view:—"According to the view which these words (contagium vivum) are understood to express, the morbific material by which a contagious disease is communicated from a diseased to a healthy person, consists of minute organisms called 'disease germs.' In order that any particle may be rightly termed a disease germ, two things must be proved concerning it—namely, first, that it is a living organism; secondly, that if it finds its way into the body of a healthy human being, or of an animal, it will produce the disease of which it is the germ." (Proc. Roy. Soc., Nov. 22nd, 1877, No. 184, p. 122.) In quoting this, I do not wish to express agreement in so strict a limitation of the words "disease germs."

[2] Klebs, Archiv. f. Path.

[3] Nägeli, Die Niederen Pilze.

[4] Cohn, various papers in Beiträge zur Biologie d. Pflanzen, Band I., Heft 2, p. 127, and Heft 3, p. 141; Band II., p. 249.

[5] Klebs, various papers in Archiv. f. Pathologie.

[6] Billroth, Coccobacteria Septica.

[7] Dallinger, various papers in Phil. Trans., Journal of Royal Microscopical Society, &c.

[8] Ray Lankester, various papers in Proc. Royal Soc., Quarterly Journal of Microscopical Science, and elsewhere.

[9] Koch, Beit. zur Biol. d. Pflanzen, Band II., p. 277, and Band II., p. 399.

[10] Klein, various papers in Quart. Jour. Micr. Science, Proc. Roy. Soc., and Seventh Annual Report of Med. Officer of Loc. Gov. Board.

[11] Cossar Ewart, Microsc. Jour., vol. xviii., and Proc. Roy. Soc., No. 188, 1878.

[12] Lewis, Dr. Timothy, Microscopic Organisms found in the Blood in Relation to Disease.

have made a study of the subject. As a very valuable elementary help in the consideration of many difficult points, I may mention the papers by Dr. Cossar Ewart, the accuracy of whose descriptions I can for the most part confirm from personal observation.

In the following brief sketch I shall limit myself to the more essential facts with regard to the commoner orders—micrococcus, bacterium, and bacillus,—and chiefly state those points which are matters of personal observation.

GENERAL CHARACTERS OF BACTERIA.

Structure.—Bacteria have been defined by Cohn as cells free from chlorophyll, of spherical, oblong or cylindrical, sometimes twisted or curved form, which increase by transverse division exclusively, and grow either isolated or in cell families. These cells consist of protoplasmic, usually colourless, cell contents, strongly refractile, in which usually shining, oil-like nucleoli or nuclei are imbedded. The protoplasm is flexible or contractile; hence their spontaneous bending and stretching when the membrane is not too rigid. The protoplasm having a different refractive index from that of water and most fluids in which they grow, their production in abundance gives rise to a milky appearance. This protoplasm is surrounded by a cell membrane, shown both by its resistance to reagents and by actual observation; this is composed of cellulose or some analogous substance. Cohn believes that the membrane is soluble, and can form the intercellular substance.

The division of bacteria, the characteristic mode of reproduction, is accomplished by longitudinal stretching to a length nearly double the normal; then a transverse constriction appears at the centre, and sooner or later the two members separate, and this process continues indefinitely. Longitudinal division is, according to Cohn, extremely rare in free bacteria. In some forms of bacteria the individual members remain attached, then form long chains, especially under certain conditions; but when free, and in most forms, they rapidly separate, only two, three, or four elements remaining attached. In most cases, when the bacteria elongate to form long threads, the division may be invisible, or seen only with difficulty.

Under certain conditions, spherical and rod bacteria, instead of elongating and dividing, and forming free single or double elements, become agglomerated into a mass consisting of a large number of individuals united by a sort of intercellular substance, which form rounded, or flattened, or irregular masses in the nutrient fluid. In these masses the bacteria continue to multiply, the individual elements being closely massed together at first, but by increase of the intercellular substance they may become more widely separated. These zooglœa masses are liable to absorb colouring matter, or to be stained by iron, or by iron and sulphur, if contained in the fluid. The multiplication in zooglœa having continued to the formation of an immense number, these may become broken up by solution of the intercellular substance, and the elements become free in the fluid. According to Cohn, this zooglœa formation is never observed either in filamentous or twisted bacteria (bacillus or spirillum) though they may accumulate in masses.

When bacteria are growing in any fluid they are apt to accumulate more or less on the top, and form a layer on the surface, called by Pasteur mycoderma, this being distinguished, according to Cohn, from zooglœa by being composed merely of individual elements, without intercellular substance.

The formation of spores of all forms of bacteria is as yet undecided. Cohn now believes that only bacilli form spores. But in zooglœa masses one constantly finds ovoid or rounded bodies, apparently derived from bacteria, and often, too, one sees bacteria containing nuclei resembling the spores of bacilli.

Most bacteria have a motile and a non-motile condition, and these alternate. Some bacteria—e.g., bact. termo—are usually motile, others motionless. In a certain number the movement has been shown to depend on cilia, in others evidence of their presence is as yet wanting.

Lastly, bacteria require the presence of oxygen for their growth and development, but are not absolutely destroyed by its absence.

Such, in brief, are some of the more important facts with regard to the nature of bacteria.

The *classification* of *schizomycetes* or *schizophytes* proposed by Cohn in 1872,[13] to which I have already referred, may serve as a convenient basis of description, although many distinctions which formed part of the groundwork of his classification cannot now be maintained. It is as follows:—

Tribe I. Sphæro-bacteria (Kugel-bacterien).
Group 1. Micrococcus (char. emend.).
Tribe II. Micro-bacteria (Stäbchen-bacterien).
Group 2. Bacterium (char. emend.).
Tribe III. Desmo-bacteria (Faden-bacterien).
Group 3. Bacillus.
" 4. Vibrio (char. emend.).
Tribe IV. Spiro-bacteria (Schrauben-bacterien).
Group 5. Spirillum (Ehrenberg).
" 6. Spirochæte (Ehrenberg).

[13] Beitr. zur Biol. d. Pflanzen, Band i., Heft 2, p. 146. It is allowed by Cohn that this classification is only provisional, though the orders are natural. Beit. zur Biol. d. Pflanzen, Band ii., p. 274.

Lecture
ON A
CASE OF INTRACRANIAL SYPHILIS.

BY
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(Concluded from p. 277.)

LATER on (March 7th) the man was admitted for left hemiplegia, which had come on (Feb. 26th) as follows:—At dinner he found he could not hold the fork in his left hand, and when he got up next morning his left leg was paralysed. This account is, I must confess, indefinite; but it suffices for the matter we have in hand. It is one of the ways in which hemiplegia from thrombosis comes on. The patient had no albuminuria; if he had, that mode of onset might signify small cerebral hæmorrhage. The hemiplegia on his admission into the hospital was not perfect, on which more anon. He still had the paralysis of the fifth and sixth nerves; and he still had the valuable diagnostic symptom, pain in the head. Mr. Atkinson notes: "He complains of severe pain at several points on his head, each painful point being about the area of a shilling. Pressure on these points increases the pain."

Superficially looked at, his paralytic condition was like that of a patient suffering from some disease of the right side of the pons Varolii; for there was then "cross paralysis." Paralysis of the fifth nerve on one side, and of the arm and leg on the other, can occur from a lesion in part of one lateral half of the pons. But the mere fact that the facial and the limb symptoms come on at different times, with a long interval, would make one hesitate in coming to such a conclusion. A man may have symptoms which, if not minutely inquired into, seem to be such as depend on disease of a part, and yet have no disease of that part. Thus I have recorded, in THE LANCET of Sept. 6th, 1873, a case of paralysis of the third nerve on one side and of the arm and leg on the other, in which case the diagnosis of disease of the crus cerebri was negatived because the two symptoms came on at different times: there was disease of the right side of the brain and syphilitic disease (a neuroma) of the right third nerve. To find evidence of two very different lesions is to find evidence in favour of syphilis, in accord with Dictum No. 2.

In some cases we have not the advantage of a history. Let us then consider this patient's condition as if we saw him for the first time, without history. The paralysis of the sixth nerve from a circumscribed lesion of the pons would be more likely to accompany paralysis of the facial (portio dura) nerve, and does more often accompany it. I do not remember a case of hemiplegia from disease of the pons Varolii in which there was paralysis of the sixth nerve without paralysis of the portio dura. I am not speaking of lateral deviation of the two eyes. If the lesion were in the pons in this case the explanation would be that the disease had first involved the trunk of the fifth, and then "eaten" its way into the adjacent substance of the pons. I would here mention that, in some cases of disease, in one lateral half of the pons Varolii there is loss or defect of

sensation of the face on the side opposite the lesion, and paralysis of the temporal and masseter (and presumably of the other muscles supplied by the fifth) on the side of the lesion. We now return to the case itself, and consider the symptoms and their relations.

It might be supposed that there was at first disease of the trunk of the fifth nerve close to the pons, and that the disease by increase involved next the right side of the pons itself. I have only once seen a case of this kind. It is, however, a legitimate supposition, and I think so even taking note of the comparative quickness with which the paralysis came on—that is, if we simply take the hemiplegia as paralysis of the *limbs* on the left. But here comes an important matter: there was some paralysis of the face on the *left*. This, saying nothing of the other evidence, leads to quite another kind of diagnosis—to the diagnosis of an independent lesion above the pons. This is an important conclusion. A hemiplegia, owing to increase of the disease of the trunk of the fifth, "eating its way" into the pons, and thereby producing hemiplegia, would scarcely have warranted us in saying that there was another and different symptom, because when we speak of another symptom, we mean one depending on another distinct lesion. We conclude, as I said, for another lesion anatomical miles above the pons. Let us now consider this entirely new and different symptom in detail.

A common variety of "syphilitic hemiplegia" is owing to thrombosis of, or of a branch of, the middle cerebral artery; the blocking of the artery produces softening of the brain, or, rather, of part of it, of the corpus striatum for example. Cerebral arteries become, so to speak, ready for blocking by syphilitic disease of their coats. Now, we found such hemiplegia as the process of thrombosis would produce in this patient. He had not only paralysis of the left limbs, but he had also on the left that degree of facial and lingual paralysis which is commonly found in ordinary hemiplegia, from the disease of corpus striatum. He could shut both eyes, but did not close the left one so tightly as the right; when he showed his upper teeth, the mouth was slightly distorted to the right. The tongue on protrusion turned very slightly to the left. (Had the tongue been, or had it become, atrophic, we should have felt certain of disease of the hypoglossal nerve-trunk or of its nucleus.) Hence the conclusion was arrived at that there was not an extension of the old lesion causing the paralysis of the fifth and sixth nerves, but an altogether new lesion higher up, some softening of the corpus striatum. This is exceedingly important in diagnosis, for it points to another lesion. More than this, it points to a very different kind of lesion from that paralysing the third, fifth, and sixth nerves. Let us contrast the *two* symptoms, syphilitic paralysis of the fifth and sixth nerves, with the syphilitic hemiplegia, or, rather, the two pathological conditions on which they depend. But first let me remark generally on the pathology of syphilitic nervous diseases.

The ascertained morbid anatomy of syphilitic nervous affections is that they are extra-nervous, *begin* in non-nervous elements of nervous organs. In this they are like nearly all cases of nervous disease of which there is a known morbid anatomy. I do not deny that there may be a clinical case to be made out for the dependence of posterior sclerosis on syphilis, which sclerosis may arise from changes primarily nervous, that is to say, beginning in the nervous elements. Fournier and others have brought forward facts on this point. Gowers, in a valuable paper on "Syphilitic Neuroses," read before the British Medical Association, Bath, Aug. 8th, 1878, has gone carefully into this question. He discriminates betwixt cases of locomotor ataxy resulting from gummata in the posterior columns and cases of posterior sclerosis. Having excluded cases where the former kind of lesion seemed likely, and cases of damage to the posterior columns, secondary to a myelitis, he found that half the cases of locomotor ataxy he examined presented a history of constitutional syphilis.[1] Recently Erb has come to a similar conclusion. Hutchinson, in a valuable paper read before the Hunterian Society, after speaking of the several supposed causes of locomotor ataxy, adduced evidence to show that syphilis was sometimes a cause or a factor in causation. In his recent lectures at the National Hospital for the Paralysed and Epileptic, Buzzard mentioned that he had found a history of syphilis in upwards of 50 per cent. of patients suffering from locomotor ataxia. In several of these there was evidence which pointed to the disease having commenced with spinal meningitis, but in a large number nothing had been observed to mark the cases as differing in their onset and course from tabes of non-specific origin. He thought that in many of these cases, if the history could be accurately known, it would often be found that early and slight symptoms of tabes (lightning pains) had really *preceded* the syphilitic infection.

I have already referred to Hutchinson's opinion, that syphilis is, by leading to degeneration of centres, a probable cause of the affection he calls ophthalmoplegia externa. Nor am I concerned to deny that syphilis affects nervous tissue primarily in other cases. All I have said is that "all we *know*" of the pathology of nervous symptoms from syphilis is that the changes begin in non-nervous tissues. There is at present only clinical evidence, excepting Gowers' observation, for the causation of nervous symptoms by syphilis producing changes *beginning in* the *nervous* elements of nervous organs. This statement leaves me as free as any one else to hold the hypothesis that syphilis may directly affect nerve tissue.

The palsy of the fifth and sixth and the hemiplegia are equally extra-nervous; or, in other words, syphilis causes these symptoms indirectly. But there is a difference betwixt them. Syphilis causes the paralysis of the parts supplied by the two nerve trunks, because the active syphilitic process beginning in connective tissue directly squeezes the nerve-fibres. This is comparatively a direct action. In syphilitic hemiplegia the process is doubly indirect. We obtain here a good illustration of Dictum No. 3. There is (1) syphilitic disease of the artery, and so far no obvious symptom; this alone is the stage of syphilis. Then (2) blocking occurs, leading to softening of the brain; this is a post-syphilitic stage. This process was first described in this country by Bristowe. Wilks, Moxon, and Allbutt have recorded cases. It has been thoroughly and methodically treated of by Huebner. I have published several cases.[2] There is no difference, so far as giving rise to hemiplegia goes, betwixt the condition produced by blocking of a syphilitic artery and that induced by blocking of a non-syphilitic—let us say of an atheromatous artery; in each there is local softening of the brain from arterial occlusion. Hence the term syphilitic hemiplegia, if convenient clinically, is scientifically inexact. In the case before us the hemiplegia depends on local cerebral softening. Whilst it may be as legitimate to speak about "syphilitic softening" as it is to say "the kettle boils," we must not *think* of the softening as being syphilitic, any more than we must *think* of the copper apparatus boiling; for the softening is *not* syphilitic, and the kettle only holds the boiling water. The expression "atheromatous hemiplegia" or "embolic hemiplegia" would be as correct a term for hemiplegia caused by blocking of an atheromatous artery, or by blocking of a healthy artery by an embolon, as is "syphilitic hemiplegia." About the artery in fault there are two things—(1) syphilitic disease, and (2) thrombosis; just as in another case there is (1) atheromatous disease, and (2) thrombosis; the final result in each is local cerebral softening. (I do not say the same kind of softening. I have not yet seen "red softening" from syphilis.)

This matter has a directly practical bearing. To show that the hemiplegia is owing to another lesion, and also to a different *kind* of lesion from that paralysing the cranial nerve, is additional evidence of syphilis. We now come to the most important part of our subject. Mark this dictum—our No. 2: "It is the *disorderly grouping* of certain symptoms, and the disorderly succession of certain symptoms, which are most characteristic of syphilis." I wrote this in 1868, and I still find it borne out by facts. "If young patients have paralysis of any one cranial nerve (excluding nerves of special sense), and at a distinct time convulsion, hemiplegia, or paraplegia, syphilis is very probable. Most generally palsy of any motor cranial nerve, followed by any other [nervous] symptom, is very suspicious of syphilis."[3]

[1] At a meeting of the Medical Society, Dec. 8th, Gowers showed sections of a cord from a young syphilitic woman; they presented scattered areas of primary sclerosis. One of them in the dorsal region occupied the lateral column, the other lateral column presenting "descending" degeneration from syphilitic brain disease. This is a very important communication to the pathology of syphilitic disease of the nervous system. In the paper referred to Gowers had already expressed the opinion that syphilis is an occasional cause of lateral sclerosis. The specimens he showed are, so far as I know, the first instalment of direct evidence on the question.

[2] London Hospital Reports, vol. iv., 1868.

[3] Med. Times and Gazette, May 23rd, 1868.

The disorderly succession and grouping point to different foci of disease. Now, had we no evidence that the hemiplegia was due to changes far away from—much higher up in the nervous system than—those producing the paralysis of the fifth and sixth nerves, we might have supposed that there was but one lesion—one involving the sixth and fifth, and simply extending into the pons.

The ascertainment of the real, the direct, pathology of this variety of "syphilitic hemiplegia" bears on therapeutics. Would you expect to cure this man's hemiplegia by iodide of potassium or by mercury? *A priori* you would have no warrant for supposing yourselves to be able to do it, for to rid him of the hemiplegia you would have to cure local cerebral softening. You might as well expect to cure hemiplegia depending on softening from plugging of an atheromatous artery by drugs. Let it be granted for the sake of argument, but only for the sake of argument, that your drugs would sweep away every vestige of syphilis in the man's body, and, among other things, the syphilitic disease of the blocked artery. Would that affect the softening which is not syphilitic, but simply softening from blood stoppage? To cure the softening you would have to get rid of the plug inside the artery, and you would have to get rid of it very soon—to get rid of it before the nervous elements of part of the corpus striatum, which the blocked vessel should supply, are starved to death. There is no treatment of any value to this end. The expression "hemiplegia caused by syphilis" is vague. To take a somewhat distant illustration. Would you expect to cure embolic hemiplegia "caused by valvular disease" if, granting it to be possible, you could restore the heart to an absolutely healthy state? Would you expect to cure an abscess of the cerebellum "caused by ear disease" if by some magical process you could restore the ear to an absolutely normal condition?

When I saw the patient for his hemiplegia, I gave him large doses of the iodide of potassium, and predicted that he would get well. He got well rapidly, but I do not believe I cured him. There is often a confusion of facts and inferences about such cases; some, in support of their opinion that the patient was cured, say, "It is a question of facts." It really is not a question of facts betwixt me and my supposed opponent. He says the man had a "syphilitic hemiplegia," that he took large doses of the iodide, and recovered. But all acknowledge these facts; the difference of opinion is as to inferences. Whilst my supposed opponent infers that the patient was cured, I infer that he simply got well, and that the drugs he took did nothing for his paralysis. I do not rest my inference on *à priori* grounds only. We happened to have a patient in the ward for recent hemiplegia (which we supposed to depend on local softening, the indirect result of atheromatous disease), as nearly like our other patient's "syphilitic hemiplegia" as could well be. We gave that man nothing at all, and he got well just as rapidly. Why did I give my syphilitic patient iodide of potassium if I believed, as I said, when prescribing it, that it would do nothing for his hemiplegia? I gave it because he was syphilitic; experience teaches us that syphilitic changes within the skull are often widespread; doubtless other arteries were syphilitically diseased, and I wanted to cure them, in order that they might not get blocked. It was a very likely thing indeed that the opposite middle cerebral artery was diseased, and our iodide might, I hoped, restore that vessel to a normal state, and prevent *its* being blocked up and causing him an attack of hemiplegia on his right side. So you see there is no inconsistency at all in believing that iodide does no good for this kind of syphilitic hemiplegia, and in energetically treating a syphilitic patient who presents this paralytic symptom for syphilis. But next you may say, "After all, in spite of what you say, your practice is just like that of your supposed opponent. Why, then, make so much of the matter?" I do so for several reasons. First, because I consider that to show what drugs will *not* do is sometimes as valuable a contribution to the art of therapeutics as to show what they will do. To say that iodide or mercurials cure this kind of hemiplegia is equivalent to saying that they cure local softening of the brain, and this is, I submit, a very erroneous inference. There are other reasons which I will give in trying to answer the question, "How was it that this patient, who was not *cured* of his hemiplegia, got *well* from it?" You may say that there was restoration of circulation by anastomosis. But then the arteries supplying the corpus striatum have no anastomosis; so this explanation will not do. You may say next that the plug shrank, and that thus the blood-stream was re-established. I do believe that the plug might disappear, but I do not believe that the man got well in that way. It is of no avail for the plug to disappear unless it does so before the nervous elements are dead. It is no use bringing food to a man who is dead, although his death was caused by starvation. I believe my patient had softening of part of his corpus striatum, and I believe he has it still, although he is rid of his hemiplegia. He is luckily alive, and when I last saw him, I am glad to say, except for the palsy of the fifth and sixth nerves, apparently robust. This is, you may say, only an inference; but it is not an inference as regards some other cases. I do not think, I know, that patients will get rid of hemiplegia notwithstanding that part of the corpus striatum remains destroyed. Of course recovery depends on the quantity of damage, and, as Charcot insists, on the exact seat of the lesion. He tells us that irrecoverable hemiplegia is owing to lesion of the internal capsule.

Why did I think this patient's paralysis would pass off? I could not, of course, be certain. I ventured on the prediction, because the paralysis was slight in degree. The following is Mr. Atkinson's account:—"There is marked loss of power in the left arm, though there is a good deal of movement remaining. All the movements are, however, somewhat impaired. He can raise the arm from the bed, but cannot, when sitting up, raise the limb until it forms a right angle with the trunk. He can flex and extend the forearm, but does so feebly. He can close his fist, but squeezes one's hand very feebly. He cannot quite extend the fingers, but can adduct and abduct them pretty well. He can oppose his thumb to his forefinger, but cannot pick up a pin without first getting it to the edge of the board on which it is placed, so that it may drop into his hand. He makes a very feeble attempt at beating the 'devil's tatoo.'"

This curiously-named operation is valuable, I think, as a means of estimating the rapidity of movement; slowness of movement is evidence of loss of power.

Mr. Atkinson notes the condition of the leg, and you will see in his account what influence the paralysis of the sixth nerve had on the patient's walk, and how needful it was to eliminate that in estimating the degree of paralysis of the lower extremity. "Keeping his right eye closed he can walk in a limping fashion, but still he lifts his left foot clear from the floor. *When he keeps both eyes open he is very unsteady.* When one tests his strength while he is lying on the bed, it is seen he can raise his left leg, but cannot overcome much resistance. There is no loss of sensibility anywhere except on the right side of his face. He has no urinary trouble."

There was another nervous symptom. One night the patient was delirious; he was shouting and talking volubly. Next day the patient said he knew all the time where he was, but was in a "half dreamy state." This did not recur. Here is another symptom to add to our "random" list, but I should not add it for purposes of diagnosis; for I do not believe that any sort of *positive* mental symptom is of any value *in the diagnosis of* any sort of primary acute disease of the brain, nor of tumour, nor of any sort of syphilitic intracranial disease. This remark does not imply that syphilitic disease may not be to blame for delirium. I spoke of the diagnostic value of the symptom. We have delirium in some cases of tubercular meningitis, but until somebody shows there to be a kind of delirium *peculiar* to tubercular meningitis I shall hesitate to take delirium as being of value in the diagnosis of that kind of acute brain disease. Delirium is, I think, a sign of "giving out" of the brain from many causes; there may be primary cerebral disease, but more often it occurs with non-cerebral diseases. I entered into this question at length in a former lecture.[4] Putting it therapeutically, delirium very often indicates exhaustion and the need for food, and in some cases stimulants. So far for positive mental symptoms; not a word is said which by implication denies that *negative* mental states, hebetude, confusion, stupor, dementia, or coma may and do help us in severe cases to the diagnosis of syphilitic brain disease.

[4] See Lecture on Softening of the Brain, THE LANCET, Sept. 4th, 1875.

A DEATH during the inhalation of chloroform is reported to have taken place last week in the South Infirmary, Cork.

BIGELOW'S OPERATION FOR STONE.

A CASE, WITH REMARKS.

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I WISH to place on record another successful case of lithotrity by Bigelow's method, and though in this instance the stone removed was of relatively small size, yet the operation was a good test of the comparative value of the proceeding, as the patient had on previous occasions, when under lithotrity, shown extreme sensitiveness to operative interference. The cure also was complete—that is, the stone was removed, all symptoms vanished, health and strength were regained, no catarrh of the bladder remained behind, and the patient was able to retain his water for the normal period.

A patient, aged sixty-six, under the care of Mr. W. B. Thorne, had for some two or three years used a catheter for prostatic troubles. On several occasions he had withdrawn from his bladder small calculi sticking in the eye of the instrument. In the summer of 1878 he was subjected to lithotrity (two sittings), and was cured of a stone, but while under treatment for a catarrh of his bladder, he was attacked with symptoms of pyelitis and was seriously ill; he slowly recovered, but the attack left his bladder in a very irritable state, so that he was obliged to abandon his customary injections of warm water.

In November, 1878, it became evident that he again had a stone in his bladder, though he was not in a favourable condition for operative interference. Throughout this winter, by Dr. G. Johnson's advice, he adopted an almost exclusively milk diet, with great benefit both as regards his vesical catarrh and his general health.

In April, 1879, I removed from his bladder, by lithotrity, portions of stone which, when dried, weighed over 150 grains; the treatment being suspended on a threatened reappearance of his symptoms of pyelitis.

In August I removed the remainder of his stone, using two scoop lithotrites and Bigelow's bottle, without causing him either discomfort or constitutional indisposition. The fragments, which were finely comminuted, weighed, when dried, eighty-two grains. Shortly after his return from the country the patient had symptoms of the passage of a renal calculus, soon followed by a recurrence of his bladder troubles. In October, 1879, I removed by Bigelow's method at one sitting of twenty minutes a stone, the collected fragments of which weighed, when dried, twenty-four grains. The operation was not followed by the least alteration of temperature, constitutional irritation, or local discomfort, but with complete relief to his symptoms.

At the present time (Feb. 13th) the patient is in better general health than he has been during the last four years. He suffers from no symptom of stone, his water is clear, he can walk six or seven miles, and, if need be, can hold his water for six or seven hours. He still voids all his urine by means of a catheter, and continues to follow, though with less rigour, the milk diet.

In this case, owing to the necessity of passing all urine through the catheter, I was unwilling to incise the meatus, and on this account the stone had to be finely pulverised, so as to pass through a No. 12 English catheter. The operation, therefore, occupied a proportionately longer time, and it was impossible to collect all this débris.

I venture to append to this account the sequel of the case of the patient from whom I removed in two sittings four ounces of calculi and fragments.[1] From a condition of urinary incontinence which existed before the operation he has completely recovered. He holds his water for four or five hours at a time by day, and rises once in the night for the purpose of relieving his bladder; he has no symptom of cystitis or catarrh, and is free from pain and irritation. His general health and strength are good.

[1] THE LANCET, Jan. 10th, 1880.

DURING the December quarter of the past year the number of deaths in Ireland from the eight principal zymotic diseases amounted to 2479, or 10·1 per cent. of the total deaths registered, and equal to 46·2 per 100,000 of the population.

ON TONGA: A REMEDY FOR NEURALGIA, USED BY THE NATIVES OF THE FIJI ISLANDS.

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A FEW months ago Mr. Ryder, a gentleman residing in Fiji, placed this remedy in our hands with the following account:—It has been used for several centuries by the aborigines of the Fiji Islands. A European, who married the daughter of a chief, learned the secret from his father-in-law, in whose family the knowledge of the composition of this remedy had been an heirloom for upwards of two hundred years. This European gave the drug to Mr. Ryder, who requested us to test its virtues.

This gentleman tells us that the remedy consists of parts of at least two plants, whose botanical relations, however, he does not know. He has returned to Fiji, and intends sending specimens of the plants, that we may learn their natural order, &c. The parts of the plants are broken up into a coarse powder, and then wrapped up in a cover of the inner bark of the cocoa-nut tree. Mr. Ryder gave us the following directions regarding its use:—"The bundle, without being unfastened, to be steeped in half a tumbler of cold water for twenty minutes, then squeeze the liquid from the bundle back again into the tumbler, and take a claret glass of the infusion three times a day, about half an hour before each meal. Dry the bundle and hang it up in a dry place to prevent its getting mouldy. It will answer for twelve months."

Mr. Ryder sent a large packet of the powder to Messrs. Allen and Hanburys, of Plough Court, City, who have prepared a liquid extract, containing one part of the drug in one part of the extract. Of this Mr. Ryder recommends a drachm three times a day. He and his friends have tried the remedy extensively, and find it most successful. He finds that it generally cures by the second or third day. In eight or ten days the pain may return, when a few additional doses permanently remove the pain. It has been used in Sydney with great success.

We have used this remedy in eight cases of neuralgia; six were promptly cured; one was much improved; in the other, after a week's trial, it failed. We give a short account of these patients.

A woman, aged twenty-three, had suffered for fourteen days from severe neuralgia of the infra-orbital and great occipital nerve. She had four severe paroxysms in the day, lasting from half an hour to an hour and a half. Many of her teeth were bad. Three doses of the extract cured her.

A woman, aged about fifty-five, had suffered from severe neuralgia for a week. The twisting dragging pain affected the supra-orbital branch of the fifth and the great occipital, and was both continuous and paroxysmal. She did not improve, though the infusion from a bag was used for a week. The bag had been used on several occasions, and possibly had become inert.

A woman suffered from neuralgia in the left great occipital nerve. Four half-drachm doses of the liquid extract cured her.

A man, aged twenty-five, had suffered for a fortnight from severe bilateral neuralgia in the temples, in the eyes, and under the eyes. Half a drachm dose of the liquid extract thrice daily cured him in three days.

A woman, aged twenty, for ten days had suffered from severe neuralgia in the first and third branch of the fifth nerve. She had daily about five paroxysms, each lasting from one to two hours. A drachm of the liquid extract thrice daily cured her in three days.

A girl, aged eighteen, suffered from toothache and severe neuralgia along the lower jaw, and in front and behind the ear. Half a drachm of the liquid extract cured the neuralgia in twenty-four hours, but the toothache continued.

A man, aged sixty, who suffered from rather severe bilateral orbital neuralgia, was greatly benefited in three days by a drachm of the extract thrice daily.

A woman, forty years old, had suffered for a month with about six severe paroxysms daily of pain in the second branch of the fifth nerve. The infusion made from a bag cured her in three days.

This remedy, whilst apparently highly useful in neuralgia, produces no toxic symptoms, for we have given two half-ounce doses of the liquid extract at half an hour's interval, and repeated it again in two hours, without producing any effect beyond slight drowsiness. To another person we gave three two-drachm doses at half an hour's interval, and only produced slight drowsiness. These doses did not affect the pupil, nor increase nor lessen the secretion of the mouth or skin, neither did they affect sensation of the skin, supplied by the fifth nerve.

Tonga does not affect the pupil when topically applied to the eye; for Mr. Copley made observations on three people, and applied in each case an aqueous extract (1 in 1) to the eye, repeating the application four times at an interval of fifteen minutes, but the pupil remained unaltered.

A

CONTRIBUTION TO CLINICAL HÆMOMETRY.

By E. BUCHANAN BAXTER, M.D., F.R.C.P.,

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FREDERICK WILLCOCKS, M.B.,

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EVERY new method intended to increase the precision of our clinical observations requires and deserves to be carefully and repeatedly tried before its claims to be added to the armoury of the practitioner are finally admitted or rejected. This consideration has induced us to put on record the results incorporated in the following paper. Taken by themselves, they are insufficient in number, and spread over too wide an area, to afford a basis for generalisation; but, taken in conjunction with similar material collected by the industry of others, they may contribute towards the formation of opinion respecting a comparatively novel mode of investigation, its chances of future usefulness, and the directions in which that usefulness is most likely to be manifested.

Forty years ago, when bleeding was in fashion, and the dominant pathology was still imbued with the humoralism of a previous generation, large hopes were entertained of the advantages to be got from the application of chemical analysis to the blood in health and disease. The material for study was abundant, and it was utilised by observers like Andral and Gavarret (1842), and Becquerel and Rodier (1844), the value of whose work has been little affected by the lapse of time. Their papers are still the chief source of our knowledge concerning the qualitative and quantitative variations in the composition of the circulating fluid in different morbid states. With our fuller understanding of the chemistry of healthy blood and our more precise and delicate methods of investigation, further labours in the same field would undoubtedly prove fruitful. Of late years, however, the attention of pathologists has become more and more concentrated on the morphological changes in the solid tissues, while the almost complete abandonment of venesection has checked the development of pathological hæmatology. The red corpuscles alone, with the hæmoglobin to which they owe their functional importance in the economy, have not been neglected. They may, indeed, be said to have received more than their due share of notice; the term "anæmia" having come to be all but synonymous with "oligocythæmia," the remaining constituents of the blood sinking altogether into the background. One reason for this may be found in the possibility of tracing the variations in the red discs and their colouring matter without taking more than infinitesimally minute quantities of blood from the body. Processes for counting the number of discs in a given volume of blood, and for determining its richness in hæmoglobin, have long been in existence. But most of these processes, owing to the time, special apparatus, and technical skill required for carrying them out, have never made their way beyond the laboratory, and have practically been restricted to the ends of physiological research. Recently, however, methods of numeration, simple enough and rapid enough for bedside use, have been devised by Malassez and Hayem. They have already yielded results of value, and may be expected to yield more at no distant period.[1]

But it is not enough to count the corpuscles. We require some means of determining their functional value, or, in other words, their richness in hæmoglobin. Strangely enough, it seems for a long time to have been taken for granted that the number of corpuscles in a given volume of blood might be taken as a measure of the hæmoglobin contained in it, and, conversely, that the number of corpuscles might be deduced from an estimate of the colouring matter. The two were supposed to vary together. Even Welcker, the pioneer in this field of investigation, did not realise the possibility of their independence of each other. From repeated examinations of his own blood he arrived at the conclusion that its richness in hæmoglobin was always proportionate to its richness in corpuscles, the differences observed being small enough to come within the limits of instrumental error. The same conclusion was arrived at by Worm Müller, who examined the blood of healthy dogs. The truth seems to be that although in health the two usually vary together, in disease the normal ratio between them may altogether cease to be maintained. This truth was first grasped by J. Duncan.[2] In three chlorotic patients, whose blood he examined by a somewhat rude method, he found that the reduction in the amount of hæmoglobin per cubic millimetre was out of all proportion to the reduction in the number of corpuscles. This led him to see the possibility of anæmia being developed in one of several modes: by a diminution of the corpuscles, by an impoverishment of the individual corpuscle, or by a combination of the two. To save words, we may call the first of these modes a *hypocytosis*, the second a *hypochrosis*. Hence the obvious need of chromometry—the direct valuation of the hæmoglobin—to supplement the results of numeration. There is a choice of methods open to the student. The most exact and delicate of these is that of Vierordt, by means of the spectroscope. It has been employed by Professor Leichtenstern[3] in what is probably the most elaborate and complete inquiry into the quantitative variations of the hæmoglobin, under various conditions both of health and disease, that has hitherto been published. For obvious reasons, however, it is little suited to the rough exigencies of hospital work, and is never likely—at all events in its present form—to become popular. Both Malassez and Hayem have contrived instruments of a simpler kind. That of the former is described and figured in the *Archives de Physiologie* for 1877. It is exceedingly ingenious, but it is surpassed in simplicity by the equally efficient chromometer of Hayem, which we used. This does not seem to have been much, if at all, employed in England; a brief account of it will, therefore, not be out of place here. It consists of two parts: the first, a glass slide (such as is used for mounting microscopic specimens), in the middle of which two small circular troughs, each capable of holding rather more than 500 cubic millimetres of liquid, are fixed side by side. Into one of these troughs a mixture of 500 cubic millimetres of distilled water, with from two and a half to ten cubic millimetres of blood, is introduced; into its fellow an equal volume of distilled water only. The second portion of the apparatus is a series of small round discs of tinted paper, ten in number, each of which is attached to the centre of a slip of white cardboard. The colour of these discs is made to match exactly with that of a series of standard mixtures of blood and distilled water, every one of which contains a known number of normal red corpuscles. We place our glass slide over one of these discs in such a way as to bring the latter exactly under the trough filled

[1] The capillary numerator of Malassez is too well known to need description; a figure of it, accompanied by full working details, is given by Professor Rutherford in his "Practical Histology." We employed the instrument of Hayem (as modified by Dr. Gowers); it seems to be the best for clinical work.

[2] Duncan's short but suggestive paper is buried in the Wien. Sitzungsber. for April, 1867.

[3] Untersuchungen über den Hæmoglobulingehalt des Blutes in gesunden und kranken Zuständen. 1878.

with pure water; we then seem to see two solutions of hæmoglobin side by side. When the tints are accurately matched the optical illusion is well-nigh perfect, and it is almost impossible to tell which trough contains the mixture of blood and water and which the water alone. The various little precautions to be observed are fully laid down in Hayem's paper,[4] and we have often verified his assertion that the practised eye is able to distinguish tints intermediate between those of two successive discs.

At this stage of the process we have ascertained that a mixture of 500 cubic millimetres of distilled water with a measured volume of blood containing a known number of red corpuscles per cubic millimetre (for chromometry is always preceded by numeration), corresponds in depth of tint to a mixture of the same quantity of water with a known number of *normal* discs. The latter figure is obtained from a table supplied with the chromometer. Supposing the corpuscles of the blood under examination to be functionally equivalent to normal corpuscles—i.e., to contain an equal proportion of hæmoglobin—the number of those in the mixture will be equal to the number represented by the coloured disc, and their ratio will equal 1. This figure represents the functional value of a normal corpuscle. Supposing the corpuscles under examination to be impoverished, they will yield a tint equivalent to that furnished by a smaller number of normal corpuscles; the ratio between the figures will be fractional. An example will make the mode of calculation plain. Let us take a specimen of blood containing 3,400,000 red corpuscles per cubic millimetre (the normal average is usually put at 5,000,000). We introduce 6 cubic millimetres of this blood, mixed with 500 cubic millimetres of water, into our trough, and find that the tint exactly matches that of the disc marked 2. On reference to the table we find that this disc represents the colouring power of 9,730,125 normal corpuscles. Accordingly, we conclude that 3,400,000 × 6, or 20,400,000 of our corpuscles, only contain as much hæmoglobin as 9,730,125 normal elements. The functional value of each of our corpuscles, referred to unity as a standard, will therefore be represented by the fraction $\frac{9,730,125}{20,400,000}$, or 0·48.

Sufficiently delicate for rough work at the bedside, and with many practical advantages, Hayem's method has one radical defect—a defect, it is only fair to add, common to it with its rivals. The standard of comparison is relative, not absolute; the "normal" corpuscle is an arbitrary unit. The blood of some one healthy individual served, in the first instance, for the construction of the scale of tints, and with this blood every other has to be compared. We are disposed to conclude, from our own observations, that the corpuscles of this standard individual were of more than average richness. As a general rule, we found the value of the corpuscle, in apparently healthy persons, to vary from ·6 to ·9 of Hayem's unit, approaching the lower much more often than the higher figure. It is interesting to find Dupérié, working under Hayem's own direction, admitting that the value of the corpuscle in healthy individuals fluctuates between 1 and 0·6.

The following are a few instances of the application of numeration and chromometry to healthy blood. N stands for the number of red corpuscles per cubic millimetre, G for the functional value of the individual corpuscle. The blood was always drawn from the finger.

1.	Male, aged thirty-five	N = 5,870,000;	G = 0·81
2.	Male, aged thirty-three	N = 6,100,000;	G = 0·91
3.	Male, aged twenty-three	N = 6,100,000;	G = 0·64
4.	Male, aged twenty-five	N = 6,890,000;	G = 0·52
5.	Male, aged twenty-five	N = 6,000,000;	G = 0·58
6.	Male, aged twenty-four	N = 6,270,000;	G = 0·55
7.	Female, aged fifty-two	N = 5,980,000;	G = 0·75

Again, the normal average of corpuscles per cubic millimetre is usually put at 5,000,000 in conformity with Welcker's estimate. We should be disposed to put it nearer 6,000,000. There is a striking absence of agreement on this point. Dupérié puts the mean at 5,100,000. Wilbouchewitsch (employing the numerator of Malassez) finds the number vary between 4,200,000 and 6,477,000; he considers Welcker's average too low. Lastly, Cutler and Bradford, who also worked with Malassez's instrument, found the average to lie between 3,000,000 and 4,000,000 only. There can be little doubt that this discrepancy ought, in large measure, to be attributed to instrumental error; the smallest fault in the original graduation of the numerator being enormously multiplied in the final calculation. Still, an error of this kind is a constant quantity, and although the possibility of its existence must make us very reluctant to compare results obtained by the use of different instruments, it will not invalidate the comparison of results obtained with the same numerator. We think it not unlikely that the values furnished by our own numerator are somewhat too high, and that the value of G is correspondingly lowered throughout. As all our observations were made with the same numerator and chromometer, however, this will not impair their *relative* significance.

Apart from instrumental errors, and errors of observation, it must be remembered that the proportion of corpuscles per cubic millimetre of blood is known to be affected by a great variety of conditions within the limits of health. The influences of age, sex, season, diet, purging, sweating, &c., all make themselves felt. Again, the proportion of corpuscles is not the same in all parts of the vascular system; it is higher, for example, in the capillaries of the skin than in the great arteries, in the great arteries than in some veins. All these physiological variations have been carefully studied. They need only to be mentioned here as a warning, not altogether unnecessary, against drawing clinical inferences from any but gross deviations from the normal standard, such as exceed the possible limits both of physiological variation and of instrumental error.

(To be continued.)

[4] Archives de Physiol., 1877, p. 946.

CASE OF FRACTURE THROUGH THE BASE OF THE SKULL; RECOVERY.

BY HARRY LUPTON, L.R.C.P. LOND.,
SURGEON TO THE STRATFORD-ON-AVON INFIRMARY.

I WAS called on the evening of May 31st, 1879, about 9.30, to Mrs. ——, who had fallen from the top to the bottom of the stairs. It was supposed that her foot had slipped on the top stair, and she fell headlong to the bottom, falling with great violence on the top of her head. She lay just as she fell, snoring loudly, until her brother-in-law, who was in the house, went to her assistance. He picked her up and carried her into an adjoining room, where she recovered consciousness, but became greatly excited in her manner; it was also noticed that she was bleeding rather profusely from her right ear.

On my arrival I found her semi-conscious, not recognising persons; rather violent in her manner, the bleeding from the ear still going on; skin cold, and moist with perspiration; pupils acted, but sluggishly, to the stimulus of light; pulse about 70, weak and compressible. I at once had her carried up to bed, and gave orders for the application of ice to the head, to be continued through the night.

June 1st.—10 A.M.: Had been alternately drowsy and wandering through the night, but on the whole seemed better than could have been expected. Pulse rather quicker. Pupils acting to light; the right perhaps not quite so readily as the left, but the difference was but very slight. Protrudes the tongue, when told to do so, without deviation towards either side. Complains of great frontal headache. 2 P.M.: Pulse quicker, 90. Has wandered a good deal. Does not recognise persons, or know where she is. Has had several "trembling fits"—rigors (?). To continue ice. Small quantities of milk to be given at intervals, room kept dark, &c. Has had a natural motion, and passed water, making known her desire to do so in each instance.—8.30 P.M.: Pulse quick, full, and bounding, 118; temperature 101·5°. Complains greatly of frontal headache. Oozing from the ear continues, but in diminished quantity. Has been very restless. To continue treatment.

2nd.—9 A.M.: Better; skin not so hot, pulse less full and bounding; has slept about half the night; pupils act more readily to light; urine and fæces passed naturally; complains of pain and throbbing in the head. To take bromide of potassium fifteen grains, solution of acetate of morphia thirty minims, and syrup of oranges twenty minims, in one ounce of water, three times a day.—2 P.M.: Has slept comfortably, and taken small quantities of milk and calvesfoot jelly.—8.30 P.M.: Expresses herself as feeling better, but

pulse quickens to 118; temperature 101°; pupils acting more readily; decidedly more conscious. To have a dose of the mixture at her usual bedtime.

3rd. — 10 A.M.: Menses commenced. Slept well at intervals during the night, but was restless and wandering between sleeps. Perfectly conscious and rational at time of my visit, and apparently much better. Pulse 98; temperature 100°. — 8.30 P.M.: Has been wandering and delirious since morning; appears better now. Pulse 84; temperature 98·8°.

4th.—10 A.M.: Much better. Pulse 78; temperature 98·8°. 8 P.M.: Perfectly conscious and rational. Complains of frontal headache. Pulse and temperature normal.

5th. — Has had a very bad night; delirious from 9 P.M. till 7.30 A.M.; skin bathed in perspiration, and drowsy and exhausted. Pulse 68; temperature 98·8°. To take four grains of calomel at once; diet as before.—9 P.M.: Pulse 80; temperature 99·8°. Has been wandering.

6th.—10.30 A.M.: Better; slept fairly well. Bowels open. Pulse 80; temperature 98·8°.—8.30 P.M.: No change.

From this time her progress to recovery was uninterrupted, and when I last saw her, July 12th, she was fairly well, but easily fatigued, and subject to headache if she attempts prolonged conversation; complains that her memory is much impaired.

Remarks.—I think I am right in regarding this as a case of fracture through the base of the skull; for (though the symptoms were less severe than are usually met with in cases of this grave injury)—first, the stream of blood issuing from the ear immediately after the accident was much too large to have come from any of the vessels of the auditory canal; it flowed in a slow and regular stream of almost half the breadth of one's finger. Second, the fluid which ran from the ear during the first two days after the accident was not pure blood, but a mixture of blood and a thinner, more serous fluid, and this in sufficient quantity to wet several towels during the day. Third, her present state, the readily induced headache, and the impaired memory.

INDUCTION OF PREMATURE LABOUR.

BY G. S. GARRARD, M.R.C.S., L.S.A.

THE following notes of a successful case of induction of premature labour at the seventh month, in a fourth pregnancy, after destruction of the children at the full term in the three previous labours, may perhaps be of sufficient interest for publication.

Mrs. —— has no apparent defect of form; her height is below the average, and her figure is small; her health has always been good. During the last eleven years, from the twenty-fifth to the completion of the thirty-sixth year of her age, she has been twice married, and has had four children, two by her first husband, which were born in London, and two by her second, which were born in this neighbourhood. Of the first two labours my patient has given me a very clear and intelligent account; the last two came under my own observation. Mrs. —— tells me that the birth of her first child occurred in London ten years ago. After twenty-four hours of strong labour pains, her medical attendant, finding that no progress was made, and that she was getting exhausted, sent for two other medical men who resided near, and that, after consultation, instruments were used, and she was delivered of a dead male child. She afterwards examined the infant, and found an opening in the head, through which the brain protruded. Her recovery was very tedious.

Two years after this she was in labour with her second child, also in London. She had another medical attendant, and, after about the same duration (twenty-four hours) of severe pains, with as little progress as in the first case, a consultation was obtained with a professor of midwifery at one of the London medical schools. Every effort, therefore, that exceptional skill and experience could suggest was now made to save the infant. After an unsuccessful attempt to use instruments (? forceps), delivery of a dead male child was effected by turning. So much force was necessary to complete this operation that the infant's neck was broken.

Mrs. —— was then advised to have premature labour induced at the seventh month in case of a third pregnancy. So long a time had elapsed, however, and such great changes had taken place in the circumstances of my patient, before pregnancy occurred for the third time, that this advice was neglected. She had lost her first husband, had remained for three years a widow, and was then married again, and come to reside in this neighbourhood. When I first saw her she was in an early stage of pregnancy with her third child, in good health and spirits, and full of hope that she might be more fortunate with her second family than she had been with the first; and, as this hope did not appear to be altogether unreasonable, the full period of pregnancy was allowed once more to expire, and I had an opportunity of watching the progress of her third labour at the full term.

On the 26th November, 1877, the pains commenced, and after they had continued for a few hours I found the os uteri fully dilated, and the head presenting, resting on the brim of the pelvis, from which position twelve hours of strong labour-pains did not advance it in the slightest degree. At this period I was glad to avail myself of the kind advice and assistance of my friend Mr. Foote, who, after examining the patient and hearing her history, agreed with me in thinking that craniotomy should be performed without further delay. We had no reason to expect that long-continued pains, which had twice before proved fruitless, would have any better result on the present occasion. The head was not within reach of the forceps, and previous experience of turning gave us no encouragement to try that operation again. She was therefore delivered of her third male infant by craniotomy. Her recovery was remarkably rapid and good.

To a finger of ordinary practice the cause of obstruction in the three cases above mentioned was not apparent; but there can be no doubt that in all alike the head was arrested in a high position, out of reach of the forceps. Some degree of contraction of the pelvic brim is therefore indicated: not great, indeed—for in the very instructive case of turning, it was found *possible* to draw the head of a child at the full term through the pelvis,—but sufficient to render the birth of a *living* child at the full term almost hopeless. Chloroform was not given in either of these cases.

When it became evident, at the beginning of 1878, that Mrs. —— was pregnant for the fourth time, it was decided that premature labour should be induced about the seventh month. Menstruation having ceased on the 7th of February, on the 3rd of October—at the end of the thirty-second week of gestation—an examination was made. The point of the forefinger could be easily passed through the os uteri, and a head presentation was at once detected. A gum-elastic bougie, No. 10, the bone end of which had been cut off, was passed through the os uteri, guided by the finger, and an endeavour was made to slide it between the membranes and the uterine wall, but after it had passed some distance it was felt to penetrate the membranes, the end was pushed completely within the vagina, and it was allowed to remain; the patient was kept in bed; there was no hæmorrhage, but a quantity of water soon began to ooze away. The bougie was introduced at 10 o'clock in the morning; at 3 o'clock in the afternoon slight pains began; they soon increased in severity, and before 7 o'clock in the evening a living female child was born. Some time before the birth of the child the bougie was withdrawn; it was found to be held with some firmness by the descent of the head. I have to thank Mr. Foote on this occasion also for his kind concurrence and assistance. The infant is now a year old, and is thriving in all respects. The mother made a good recovery. One more proof may, therefore, be added to the many which already exist, of the value of the induction of premature labour; and, although the mode of operation selected in this case has no doubt been often adopted with success, it would be difficult to find a better illustration than that afforded in the present instance of its sometimes safe, speedy, and efficient action.

On the 5th November, 1879, Mrs. —— was again successfully delivered of a child—male—by induction of premature labour at about the thirty-fourth week, aided by the forceps.

Kington, Herefordshire.

THE governors of the Royal Surrey County Hospital are able to congratulate themselves, at the end of another year's work, on the possession of a slightly larger balance than at the previous annual meeting. The excess of income over expenditure for 1879 was £175. This state of things was not, however, brought about by restricting the benefits of the institution, as the number both in- and out-patients during the year showed a slight increase.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum propriis collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

SURGICAL CASES ILLUSTRATING WOUND TREATMENT AND REPAIR.

(Under the care of Mr. BRYANT.)

THIS series, begun at page 286, is continued from page 328.

Cancer of the Breast; Excision, with Enucleation of Axillary Glands; Primary Union of Wound. (From notes taken by Mr. Palmer.)—Sarah J——, aged forty-four, was admitted into Lydia ward on Nov. 5th, 1879. She was a widow, the mother of nine children, the youngest being six years old. She had suckled all her children, and had never had any breast trouble. One year ago she noticed a small lump in the left breast, which slowly increased in size. She experienced no pain until a month before admission, and then she had at intervals sharp lancinating pain.

On admission there was a hard tumour of considerable size, involving the whole of the gland-tissue on the left breast. The skin was adherent to the tumour, but the whole moved freely over the parts beneath. The axillary glands were enlarged. The nipple was slightly retracted, and upon squeezing a small quantity of serous liquid exuded.

On Nov. 11th, under chloroform, the whole breast was amputated. The incision was extended to the axilla, and one of the glands was enucleated. The tumour was a scirrhus carcinoma, and involved the whole breast.

On Nov. 13th the catamenia appeared. Next day the wound was dressed. It had healed, except at one end, where the drainage-tube protruded. On the 24th the wound was healed, and on Dec. 1st the patient left the hospital. The temperature in this case rose to 103·8° in the three days following the operation, yet there was no constitutional disturbance, and the wound healed nearly by primary union in its whole extent. After the 16th the temperature varied from 98·2° to 99°.

Carcinoma of Breast; Excision; Recovery. (From notes taken by Mr. Palmer).—Louisa N——, aged forty-six, was admitted into Lydia ward on Nov. 6th, 1879, for "some disease of the right breast." She was married, and mother of three children, whom she had suckled at the left breast, as the right had always troubled her, and the nipple was not properly formed. Fifteen months ago catamenia ceased, and four months after a small painless lump appeared in the right breast. It grew rapidly, and about four months before admission commenced to cause pain.

On admission the patient appeared healthy. The breast on the right side looked like a large irregular mass, extending into the lower part of the axilla. The skin was adherent to the tumour, which was perhaps attached to the muscle beneath. The surface was wrinkled with radiating lines, which were probably enlarged lymphatics. The nipple was very much retracted, but was not ulcerated. There were no enlarged glands in the axilla. The left breast was healthy.

On Nov. 11th, under chloroform, two elliptical incisions were made, and the whole breast, with the diseased skin over it, was dissected away. The wound was well washed with iodine water. The skin could not be brought into apposition after, but was drawn together by strapping. The wound was dressed with terebine oil and lint. Next day the catamenia returned.

On the 14th the wound was dressed, and looked very healthy. Free granulations were being thrown out, and healthy-looking pus covered the surface. On Dec. 1st thirty grafts were applied to the surface of the wound. On the 3rd twenty-four fresh grafts were applied.

The bowels caused some trouble, but the wound granulated up very nicely, and the patient was discharged on Dec. 22nd with a quite dry wound surface, and the depression nearly filled up with new healthy-looking tissue. The temperature only once reached 100°, and that was on the evening of the 14th. After the 15th it was normal.

Adenoma of Breast; Excision; Recovery. (From notes taken by Mr. Row.)—Caroline P——, aged thirty-eight, was admitted into Lydia ward on Dec. 9th, 1879. Eight months before admission the patient first noticed a hard lump, about the size of a small acorn, an inch above and to the inner side of the nipple of the left breast. Three weeks ago she noticed a shooting and pricking pain, and also that the lump was increasing. There had been no discharge from the nipple. Occasionally at the menstrual periods she had felt some fulness in the diseased breast.

On admission she was a healthy-looking, well-nourished woman. A firm, movable mass, about the size of a walnut, could be felt beneath and to the inner side of the nipple; it was attached, but not firmly, to the mammary gland. There were no enlarged lymphatics of glands.

On Dec. 12th, under an anæsthetic, the growth was removed without trouble by enucleation; it was an adenoma. The patient was sick during the night after the operation, and was troubled with pain in the shoulder. On Dec. 22nd, when the wound was dressed, it was found to have healed in great part. The bowels were confined. On the 31st the wound was nearly healed. On Jan. 3rd, 1880, she was discharged.

The temperature of the patient never rose higher than 99·4°, except on the fifth day, when the bowels were confined.

(This series will be continued in a future number.)

WEST LONDON HOSPITAL.

ASCITES SUCCESSFULLY TREATED BY TAPPING WITH SOUTHEY'S FINE TROCAR.

(Under the care of Dr. THOROWGOOD.)

FOR the following notes we are indebted to Mr. Blamey, house-physician.

Henry S——, aged about thirty years, was admitted on Nov. 17th, 1879. The patient had been in the army, and while in the West Indies was laid up with an attack of "break-bone fever." He stated that he had never drunk much, his usual beverage in the West Indies being rum, and this on returning to England he exchanged for gin. He got on pretty well till 1876, when he was invalided from the army at Aldershot on account of bronchitis and heart disease. Gradually he noticed some swelling of his right foot, and then he found his abdomen larger than usual. During September, 1879, he was under the care of Dr. Fish as out-patient at the West London Hospital with well-marked ascites, and on the 17th of November he was sent into the hospital.

On admission his abdomen was distended and very tender, the circumferential measurement at umbilicus was thirty-seven inches, a few enlarged veins were seen on the surface, and the left lobe of the liver was tender and swollen. He had a mitral regurgitant murmur, and subcrepitant râles were audible at the lung bases. He had never vomited blood, or passed any by the bowels; had complained of cough, burning acid risings, and a good deal of soreness and pain at the epigastrium.

On Nov. 21st, pulse 84, urine four pints, clear, free from albumen. Ordered five grains of compound ipecacuanha powder and three grains of mercury-and-chalk powder every night.

The remedies not making any reduction on his ascites, on Dec. 2nd Mr. Blamey placed him on his right side and introduced one of Dr. Southey's fine trocars in the mesial line, two inches below the umbilicus. The instrument was retained for five hours, during which time eight quarts of clear, greenish-looking fluid drained away. In the evening the temperature was 100°, and the man complained of much pain over the abdomen. Pulse rapid and irregular. To continue the powders as before.

The patient gradually improved, and on Jan. 8th, 1880, was allowed to leave the hospital, feeling himself quite well. The abdominal tenderness had subsided; the belly was flat and resonant at the lowest part of each flank, and now measured 29·5 inches at umbilicus. The tongue was clean; appetite good, and liver dulness normal. For a week he had taken nitro-hydrochloric acid, with taraxacum and infusion of gentian.

The point of interest in this case seemed to be the value

of gradual evacuation of the ascitic fluid. The marked abdominal tenderness rendered it advisable to give small doses of Dover's powder before the operation to keep the intestines quiet. The valvular disease of the heart was another reason for taking away the fluid very slowly.

The increased temperature after the operation, the pain and tenderness complained of by the patient for several days, and the quick and irregular pulse, all showed that the precautions were not likely to have been taken needlessly. The fine trocar and tube had previously proved beneficial in the case of a man in the hospital with enormously swelled legs on whom Mr. Blamey operated, and the case of ascites seemed quite a fitting one to treat on the same principle. Dr. Southey had very kindly explained every detail in the management of the trocar and tube, and the result was as satisfactory as could be desired.

LEEDS GENERAL INFIRMARY.

CASES OF NERVOUS DISEASE, PRESENTING OPHTHALMOSCOPIC PHENOMENA.

FOR the following notes, continued from page 329, we are indebted to Dr. E. H. Jacob, late resident physician.

CASE 7. *Aphasia; Hemiplegia; Optic Neuritis; Partial recovery.* — W. S——, aged thirty-three, was admitted Oct. 11th, 1878, under the care of Dr. Heaton. He was brought to the hospital by his landlady, with whom he had lodged for a year and a half, who stated that he was strictly temperate, but had suffered from pain in the head for the last year, occasionally severe enough to make him stop work. He had had good work, but had not lived well. Two weeks before he began to suffer from severe pain in the forehead, and his speech became incoherent; his hands shook, but there was no special loss of power. Nine days before he stumbled while going upstairs, and then seemed to lose his senses for a short time. He did not work after on account of the severe pain in the head.

On admission he was rather thin, and not very intelligent. There was great difficulty in getting any information from him. He occasionally said a few words distinctly and short sentences, but frequently did not seem to understand what was said to him. He sometimes appeared amused at his own failure to make himself intelligible. He complained of frontal pain. He would not put out his tongue or shut his eyes when told to do so. He heard a watch on the right, but not on the left side. There was slight ptosis of the right eye. The right pupil was larger than the left, and there was considerable thinning of the choroid on the inner side of both discs, especially on the right, in which the sight appeared to be impaired. There was no loss of power in the arms or legs, but the hands were rather tremulous. The pulse was rather tense. The second sound over the aorta was sharp. The lungs were healthy. Urine 1012, pale and clear, but with no albumen. Appetite good; bowels open; sleep good.

On Oct. 19th there was well-marked effusion round the right optic disc. There was complete loss of power over the left arm, and considerable loss over the leg. No facial paralysis. His speech was still more incoherent. Right pupil dilated. On the 22nd he had croton oil to move his bowels, which were much confined. He was very noisy at night. There was some paralysis of the left side of his face. Tongue coated; breath offensive. Pupils were equal. He remained for some days in a comatose condition, and his death was daily expected. But about Nov. 1st he began to slowly improve, and regained considerable power in his limbs. On Nov. 5th he could walk with some assistance, but appeared to understand very little what was said to him. There was some return of power in the hand. On the 7th he could move the hand freely, and his speech was rather more intelligible. He remained in the hospital till Jan. 11th. Slightly improving, but his speech still continued to a certain extent incoherent, and the state of his hand did not admit of his doing any work. He was removed by the parish authorities.

The treatment consisted of iodide of potassium in five to fifteen-grain doses.

CASE 8. *Cerebral and Spinal Tumour; Optic Neuritis; Paraplegia.*—A. M——, aged sixteen, miner, was admitted on April 8th, 1879, under the care of Dr. Heaton. His mother died of diabetes. With the exception of a bronchitic attack a year and a half previously he has had good health up to three months ago. He then began rather suddenly to suffer from weakness and trembling in his limbs, with excessive vomiting. He was also observed to ramble a good deal and to be very emotional; he then complained of failing sight, and pain in the head.

On admission he was fairly nourished but pale, hesitated in his speech, complained of his eyes being weak, and constantly blinked with his right eye. He did not complain of pain. There was almost entire loss of power over the legs. Tactile and electro-sensibility were moderate. There was not much wasting, but considerable impairment of faradaic reaction. Reflex action normal. There was no special tenderness; there was double optic neuritis, with external effusion, and atrophic patches in the choroid. He had a small bedsore on the lower part of the sacrum, and a small ulcer outside the right ankle. There was nothing abnormal in the heart or lungs. On the previous day he passed urine and fæces unconsciously.

On May 12th he had a paroxysm of delirium in the night. He was very emotional, and the other symptoms remained the same. On the 26th there were spasmodic twitchings of the legs, at times severe. There was complete incontinence of urine and fæces. On the 30th he had a severe rigor. On June 3rd the rigor recurred in the night. His intellect was decidedly blunted, and next day he was rather deaf; there was some rigidity and pain about the shoulders. Reflex action not so marked. There were bedsores on prominent parts. There was a well-marked rhythmical tremor in both arms on movement; the arms were much wasted; face pale, with lividity of lips and cheeks. He was very emotional—laughing and crying by turns; very deaf, and occasionally he vomited. His temperature (100° on admission) for the first five weeks varied between 98·4° and 100°; then it gradually rose, and on the 2nd reached 105°, sinking to 100° on the morning of the 3rd. On the 8th the left leg below the knee was œdematous; the pupils were unequal, the left being contracted. On the 9th, acute bedsores appeared on the heels and great toes, the anæsthesia had increased, and the reflex action was less. The mental confusion had also increased. Temperature averaged 103°. Constant vomiting set in, and he died on the 13th.

Necropsy, twenty-four hours after death.—Body much emaciated. Rigor mortis well marked. Bedsores on heels and all prominent points of the back; those on the heels being distinctly of an acute nature, being large, punched-out, circular cavities, exposing in some parts the subjacent bones, and in others filled with a thick, black slough; margins sharp, red, and granulating, and surrounded by a red areola, half an inch in breadth. The brain weighed 48 oz.; symmetrical and of fair consistence; no changes at the base or in the membranes. On removing the upper part of the left hemisphere, and making transverse sections of the parts removed from its cut surface to the convexity, at the point where the sections exposed the grey matter, small, rounded, tolerably tough masses of cheesy consistence and yellowish colour were seen, evidently connected with the membranes, in the sulcus of which they were situated, and involving both white and grey substance, though sharply defined from the surrounding tissue. The right hemisphere was affected in a similar way, but not to so marked a degree. The nodules were scattered indiscriminately throughout the sulci on the convexity, but perhaps more towards the anterior than the posterior part of the hemisphere. The third and right lateral ventricles were much distorted, the floor of the latter having a swollen, irregular appearance, and the former being much expanded, especially on the right side. Each corpus striatum contained a large yellow, caseous-looking mass, similar to those described on the surface. Each was situated at the anterior part of the intraventricular portions of the ganglion; the left was larger than the right. Similar masses were found scattered throughout the cerebellum. The medulla, pons, and crura cerebri were unaffected. The membranes of the spinal cord were healthy; the tissues of the cord itself were normal till the lower fourth of the dorsal region was reached, when the cord began to lose its natural consistency, and become soft and semi-diffluent. This softening occupied a portion of the cord three inches and a half in length. In the centre of this softened portion was a nodule of precisely similar appearance to those described above, only a thin layer of cord tissue being left on its surface. This was of cartilaginous consistence, soft and caseous in the centre. The roots of the nerves were free from any change. The apices of both lungs were riddled with small caseating

masses, apparently connected with the smaller bronchioles. Hydrostatic congestion of both bases; old pleuritic adhesions on left side. The kidneys weighed fifteen ounces, swollen. There were points of ecchymosis on the surfaces, and two or three small greyish semi-transparent nodules (tubercles). Gland tissue striped with bands of congestion with a few suppurating points. The liver was healthy; no evidence of syphilis or tubercle. The left knee contained a quantity of serum, and the synovial membrane was injected, and of velvety appearance. (The account of the autopsy, and a part of the notes of this case, are supplied by Dr. Barrs, Dr. Jacob's successor.)

(The series will be continued in a future number.)

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Annual Meeting.—The Vote to the Harvey Memorial Fund. President's Address.

THE annual general meeting of this Society was held on the 1st inst.; J. E. Erichsen, F.R.S., Esq., President, in the chair. The question of the vote of fifty guineas to the Harvey Memorial Fund, made at the last annual meeting, came on for consideration, and after a debate lasting for nearly an hour, a motion to rescind the vote, proposed by Dr. John Harley and seconded by Dr. Greenhow, was lost on a show of hands by 24 to 22. The President then delivered the customary address, dealing with the life-work of those Fellows who had died during the past year.

The PRESIDENT took the chair at 8 P.M., and on opening the ballot nominated Dr. Poore and Mr. R. W. Parker as scrutineers. The audited balance-sheet of the income and expenditure of the Society for the year 1879 had been previously circulated among the Fellows, and was therefore, as usual, taken as read; and the hon. sec., Mr. T. Holmes, at once commenced the reading of the Report of the President and Council. The Report was a favourable one as to the increase in the number of the Fellows; the deaths had been seventeen, and consisted of ten resident and seven non-resident, the former including many important workers in the Society whose faces had long been familiar ones at its meetings. The new Fellows elected were thirty-two—considerably above the average—and of these twenty-six were resident and six non-resident. After making some further special statements relative to changes among the Fellows, the report stated that the total number, resident and non-resident, had increased in the year from 666 to 679. The receipts of the year for subscription and admission-fees exceeded those of last year by about £130, the ordinary expenditure was slightly greater than the average of the last three years. The extraordinary expenditure in the printing of the catalogue and index had been £614, which had been met by the sale of funded property to the amount of £500, the sale of the catalogue to the amount of £60 10s., and the payment of the balance out of the year's income. The Reports of the Scientific Committees on Membranous Croup and Diphtheria, and on Suspended Animation had both been read and discussed at meetings during the past year. The Report referred to the question of the contribution of fifty guineas to the Harvey Memorial Fund, agreed to at the last annual meeting, which was again to be brought before the general meeting by the Council, owing to their having received counsel's opinion adverse to the legality of the grant. The Report relative to the library stated as usual the number of additions during the year, its favourable condition and the triennial inspection, and the completion of the library, copies of the new catalogue and index, with the shelf references, &c. It also included tables of statistics as given for a long period every third year, of the number of works and of volumes in the library, number last out and of visits of Fellows. The adoption of the Report was moved by Dr. Greenhow, seconded by Mr. R. W. Parker, and carried.

The PRESIDENT explained the reasons why the Council had referred the question of the payment of a subscription to the Harvey Memorial Fund to the Fellows for reconsideration. He stated that an ex-President, Mr. J. M. Arnott, on hearing of the vote passed last year, had taken counsel's opinion on the subject, and that opinion was to the effect that the grant was beyond the scope of the Society. The Council thereupon, through their solicitor, obtained an opinion from another eminent counsel, also adverse to the grant. One of the Vice-presidents (Dr. Quain) had, however, obtained counsel's opinion to the effect that it *was* within the Society's power to make such a grant. Under these circumstances the Council deemed it best to refer the matter for final decision.—Dr. JOHN HARLEY then moved a resolution to the effect that the vote of last year be rescinded in accordance with the opinion obtained through the Society's legal adviser.—Dr. GREENHOW seconded the resolution on the ground that it had been shown to be illegal to make this vote by the opinion obtained through the Society's own lawyer—a view with which he entirely coincided. Harvey needed no memorial.—Dr. QUAIN maintained that, if the opinions adverse to the vote were correct, then the Society would have no power to expend its funds in any other way than on the maintenance of the library, rooms, &c. He had submitted the case to Mr. Chitty, Q.C.—a great authority on charters,—and obtained from him an opinion which he read to the Fellows. He had taken this step because he felt it right to show that the Society had no narrow limits imposed on it by its charter in the disposal of its funds.—Mr. COOPER FORSTER hoped the Fellows would have regard for him in his position as treasurer. If they voted this money they would be compelling him to do that which their own counsel had declared was illegal; and in that case he might find himself in the unpleasant position of having a mandamus issued against him to call upon him to refund the amount so disposed of.—Dr. J. HARLEY urged that by voting the sum an injurious precedent would be raised, which would weaken the bonds of the Society.—Mr. BIRKETT did not think the matter much open to legal discussion. An opinion could be got in any way one pleased, according as the case was presented to the counsel. Here their own counsel had passed an opinion adverse to the vote. But the question opened up a new state of things with regard to the funds of the Society. Hitherto they had expended their funds in accordance with the original intention, and if this new precedent were originated they might have many applications of a similar kind. But there was a precedent for not acceding to the application. When John Hunter's monument was erected in Westminster Abbey, the Society was asked to subscribe, but refused on the ground that it was beyond their scope. The Society might have opened a subscription in their rooms, and obtained the fund from individual members, but they could not grant this in their collective capacity.—Dr. SYMES THOMPSON and INSPECTOR-GENERAL MURRAY also spoke, the former in favour, the latter in opposition to the grant.—Dr. CHARLES WEST was not aware there was so much difference of opinion on the subject. He was president of the Society when it was first discussed in council, when it was agreed to recommend the Fellows to make the grant. In matters of right no opinion of counsel was required. By making this grant the Society would do honour to themselves in doing something to pay their debt of gratitude to Harvey, for whom there was no precedent. A subscription from individual members of the Society would not carry with it half the weight or honour that one from the Society as a whole would. Two years ago, in Rome, he saw a tablet, which had just been raised to the memory of Cesalpinus, with an inscription lauding him as the discoverer of the circulation. It had been erected by the Medical and Chirurgical Society of that city. And yet our Society is unable to pay a smaller tribute to the memory of a far greater man—the true discoverer of the circulation, because forsooth its hands were tied. Laws were sometimes, when they shackled and bound us from doing the right, better honoured in the breach than in the observance.—Mr. HOLMES was quite of Dr. West's opinion, and thought it a pity that the Society should be so shackled, and with Dr. West, he would rather the Society ran the risk of a breach of the law, and pay this tribute to Harvey. But as many whose opinions were worthy of all respect took a different view, he would suggest, as a compromise, that a voluntary subscription be raised among the Fellows of the Society, the proceeds to be sent to the fund as the contribution of the Society. It would

be a disgrace to the Society if it did not contribute, seeing that the Colleges of Physicians and Surgeons, and other medical Societies have done so.—Dr. WEST said that such a subscription would *not* be the subscription of the Society; it would not be comparable to that of the College of Physicians, which was granted out of the funds of the college.—Mr. C. FORSTER cordially seconded Mr. Holmes's proposal.—Dr. WEST reiterated that this would not be the Society's contribution; and he trusted, for the honour of the Society, that the compromise would not be accepted.—Dr. PAVY pointed out that if in making this grant the Society exceeded its powers, the constitutional thing to do would be for the promoters to obtain alteration in the charter. It may happen that in years to come this step would be cited as a precedent.—Dr. QUAIN said it was impossible to render the charter plainer than it was. It distinctly empowered the Society to devote its funds to alien objects.—Dr. GREENHOW urged that they were but trustees of the Society's property, and had no right to do that which would form a precedent for its disposal beyond the direct objects of the Society.—On a show of hands, 22 voted for Dr. Harley's resolution, and 24 against. The resolution for rescinding the vote of last year was therefore lost by a majority of two.

The PRESIDENT then addressed the meeting, and, after alluding to the general condition of the Society, the valuable volume of Transactions for the previous session, and the completion of the new catalogue and subject index of the Society's extensive and important library, he gave short obituary notices of the seventeen Fellows who had died since the last anniversary meeting. They comprised, among the resident Fellows, the names of Charles Murchison, M.D., Charles Brooke, F.R.S., Tilbury Fox, M.D., Patrick Black, M.D., George W. Callender, F.R.S., Arthur Leared, M.D., John Soelberg Wells, F.R.C.S., Duncan Maclure, M.B., Henry Hancock, F.R.C.S., and Edward Cator Seaton, M.D., and among the non-residents, those of Jesse Leach, F.R.C.S. (Heywood), William Reeves, M.D. (Carlisle), Samuel Wood, F.R.C.S. (Shrewsbury), Frederick Collins, M.D. (Wanstead), Richard Francis George, M.R.C.S. (Bath), Thomas Cutler, M.D. (Spa, Belgium), and Alfred Keyser, F.R.C.S. (Berkhampstead).

A vote of thanks to the President for his address was moved by Sir H. Thompson, seconded by Dr. Cholmeley, and carried with applause.

Votes were also passed to the retiring Vice-presidents and other members of the Council, moved by Dr. Douglas Powell, seconded by Mr. Heath, and to the retiring secretary, Dr. James Andrew, moved by Dr. Symes Thompson, and seconded by Dr. John Harley.

CLINICAL SOCIETY OF LONDON.

Treatment of Impacted Urethral Calculus.—Pott's Disease (with Paraplegia) treated by Sayre's Jacket.—Death from a Kink in the Duodenum.—Molluscum Fibrosum.

THE ordinary meeting of this Society was held on Feb. 27th, the President, Dr. E. H. Greenhow, F.R.S., in the chair. A case read by Dr. Buzzard contained points of surgical and medical interest—viz., the application of Sayre's jacket for angular curvature of the spine, and the diagnosis and treatment of acute intestinal obstruction; the case was one of paraplegia with spinal disease, ending fatally from a volvulus of the intestine. Dr. Sangster showed a case of molluscum fibrosum; and Mr. G. Brown a specimen of intra-pelvic tumour, the details of which he intends shortly to bring before the Society.

Mr. TEEVAN read notes of a case of Impacted Urethral Calculus treated by Lithotrity, after it had been pushed back into the Bladder. He brought it forward to illustrate the use of the wax bougie. The case was one of retention of urine in a large muscular man; the retention was of twelve hours' duration, and had caused an increasing difficulty in micturition lasting for ten days. Some years before he had passed some calculi per urethram. Mr. Teevan, passing a silver catheter, came in contact with a stone impacted in the urethra. Accordingly he introduced a wax bougie, and passing it down to the stone pushed this back into the bladder; then introduced the lithotrite and crushed the calculus, which was about the size of a hazel nut, and composed of oxalate of lime. It had become impacted in the membranous urethra; and the author pointed out that when this occurred it was far easier to push it back into the bladder than to attempt its extraction by pulling it forward. For this (the former) purpose a bougie of wax, which moulded itself to the stone, was the most useful.

Dr. BUZZARD read notes of a case of Paraplegia, with Pott's Disease, treated by Sayre's Jacket; death from a kink in the duodenum. The patient was a young labouring man, who had suffered for some time from pain in the back. In November, 1878, he lost power in his legs, and in January, 1879, took to his bed. In April he was admitted into the National Hospital, under Dr. Buzzard's care. He was then completely paraplegic, due to angular curvature in the dorsal region, the angle being opposite to the sixth spinous process. There were marked wasting of the lower limbs and complete cutaneous anæsthesia over lower half of body from a line two inches below the nipples. There was greatly exaggerated reflex action. On April 24th he was swung and encased in a Sayre's splint. On the 28th he was feeling comfortable, and there was less twitching in the legs. On the 30th he dined heartily off dough pudding; his bowels were moved in the afternoon, but in the evening he was seized with vomiting which continued through the night. The plaster casing was removed, and morphia injected hypodermically. Next day there was much abdominal tenderness, and marked distension to left of epigastrium, percussion showing that this was due to distension of the stomach. The vomiting continued, the matters ejected being greenish and watery. The vomiting was temporarily controlled by the morphia, but on the following day it recurred with violence, and he died from exhaustion. It should be said that an enema had been given, which resulted in a slight evacuation. The symptoms of intestinal obstruction had lasted for sixty-eight hours, and at no time was the vomiting "fæcal." At the post-mortem examination there was found the projection of the sixth dorsal vertebra, and caries of the bodies of the sixth to eighth vertebræ, two semi-fluctuating swellings projecting into the thorax on each side of the spine filled with inspissated pus. The canal formed an angle of forty-five degrees at the point of curvature. The dura mater was thickened and inflamed on its outer surface, but there was no lymph or adhesions around the cord, which was softened, especially opposite the fifth and sixth vertebræ. In the abdomen the duodenum was found to be folded sharply on itself about eight or ten inches from the pylorus. Below this point the gut was collapsed; above it was greatly distended, the distension being shared in by the stomach, so that the pyloric valve was almost obliterated. The distended stomach and duodenum contained much greenish fluid. The duodenal mucous membrane was congested, and the mesenteric vessels engorged. The dilated stomach reached into the umbilical and right lumbar regions. Dr. Buzzard remarked upon the several points of interest in the case. The origin of the spinal disease appeared to be traumatic—due to strain from carrying heavy weights. In a case now in hospital there is a similar history, but in neither of the cases is there any evidence of strumous disease, so that they bear out Professor Sayre's views as to traumatism being a great factor in the production of spinal disease. The cause of the paraplegia was the softening of the cord opposite to the diseased vertebræ, although there was no continuity of inflammation between the dura and the cord, and although the canal at the curvature was not narrowed sufficiently to have compressed the cord. The Sayre's splint was applied to obviate the necessity for continued recumbency, and the question arose whether the jacket conduced to the occurrence of the volvulus. The situation of this twist was rare. Brinton says only a fourth of the cases of intestinal obstruction are met with in the small intestine, and of these cases the ileum is the most frequent site. In this case the innervation of the intestines was probably interfered with owing to the softening of the spinal cord. The seat of the kink was at the point where the duodenum is most fixed—viz., at its passage into the jejunum. It is conceivable that when the ribs were fixed by the jacket, and the stomach inordinately distended by a heavy meal, the jejunum was pressed down in inspiration, and, owing to feeble peristalsis or absence of peristalsis, the twisted gut, pressed between the abdominal wall and spine became unable to unravel itself. The incident may have been a coincidence, but a case of fatal vomiting after one application of Sayre's jacket is recorded by Mr. Willett in

St. Barth. Hosp. Reports, vol. xiv. The seat of the obstruction during life was thought to have been high up from the rapid occurrence of vomiting; and it was thought possible that the intestine had become blocked by the dough food he had so freely indulged in. As it turned out, the case would have been favourable for operative interference—i. e., if the opinion was that the region involved could have been readily reached by the surgeon. — The PRESIDENT asked whether any unusual strain, any injury on a particular occasion, could be traced as giving rise to the spinal disease. He also asked what were the microscopical appearances presented by the diseased cord. — Dr. DUCKWORTH inquired whether any ulceration existed in the bowel at the seat of the twist, which might have led to this change. He had more than once found it necessary to direct a Sayre's jacket to be removed, owing to the occurrence of impeded respiration, bronchitis, &c. — Mr. HEATH pointed out that the volvulus was to the left of the mesenteric artery, and in the jejunum rather than duodenum. It occurred at the spot where rupture of the bowel mostly occurs in abdominal injuries, the explanation given being that the whole weight of the intestines is borne by the mesenteric fold around the artery. This fact might account for the folding over of the gut at this spot, when some cause was added to the weight of the intestines. It was difficult to assign this effect to the meal partaken by the patient, and he could hardly think that the pressure on the ribs above would suffice to have produced the displacement, seeing that this compression was not nearly so much as that produced by tight lacing, and that the accident did not happen until some days after the jacket had been applied. He was interested at the discovery of the abscesses in front of the spine; it had been said that spinal caries could occur without suppuration; but he believed that this is never the case, the statement arising from the rarity with which the spine was examined. — Mr. MARSH would be glad if Dr. Buzzard would give his reasons for attributing the spinal disease to mechanical violence. The occurrence of injury would not exclude a substratum of scrofula, and he thought all surgeons were inclining strongly to the belief in the existence of a constitutional defect underlying these cases of disease of the cancellous texture of bone. Speaking of the intestinal obstruction, he pointed out that the rapidity with which it ended fatally was a great argument in favour of having early recourse to surgical interference. When it was remembered in how many cases the abdomen could be safely opened, and how large a proportion of cases of intestinal obstruction ended fatally, he thought that when the operation was allowed better play than at present the outlook of these cases would be more hopeful. A few weeks ago he was called to operate in a supposed case of hernia; the sac only contained fluid, and on search he found an internal strangulation, which he relieved. Unfortunately the patient died from blood-poisoning, contracted from a neighbouring case. Surgery must be allowed more play in the future in such cases. The old plan of giving morphia (and he asked why it was followed in this case) only served to mask the symptoms, and to delay the operation, and often after death an obstruction was found, which could have been relieved by operation. There was some misapprehension as to the fitting of the bandage. Sayre's statement that it was perfectly moulded to ribs and interspaces was absurd, for if that were the case the patient could not breathe at all. In the majority of cases the bandage does not cause any obstruction to respiration or circulation, and the "dinner-pad" allowed free play to the abdominal muscles; but he would be sorry to think that it was liable to lead to intestinal obstruction.—Dr. BUZZARD wished to know if the seat of obstruction in this case would have been any bar to operation.—Mr. MARSH said that in two or three cases of laparotomy he had traced the intestine quite up to its fixed attachment at the duodenum. The distension of the stomach might have created an extra difficulty.—Dr. DUFFIN had recently under his care a case of Pott's disease with paraplegia, in a young man aged twenty-two, to whom Sayre's jacket was applied. There was not much loss of sensibility; the temperature of the lower limbs was good, and there was a sense of constriction around the trunk at the level of the ninth and tenth ribs. After the bandage had been applied for a week it was removed, and reapplied after an aperture had been made over the most prominent part, to enable the application of the actual cautery over the spine. The cautery was thus applied in two or three spots, and the man improved so much as to be able to walk three miles without difficulty. How much of this benefit was due to the bandage, and how much to the cautery, it was difficult to say. The chest and spine were fixed by the bandage, but there was nothing to interfere with the movements of the intestines.—Mr. BARKER asked the author whether the abscesses were so placed as to have compressed the cord. He pointed out that when the plaster case is put on the thorax is distended, and therefore after its application there is ample room for respiratory movements. Another point was that when the body is swung the shape of the thorax is that of a double inverted cone, and no constriction was produced in the abdomen by the casing; if anything freer play was given to the intestinal movements than before. He had examined a case (put up by Professor Sayre) which had died from pneumonia. He asked Dr. Buzzard if there was any evidence of considerable pressure on the dura mater.—Dr. COUPLAND pointed out, in reference to what had fallen from Mr. Marsh, that the great difficulty in the way of calling in early surgical aid in cases of acute obstruction was that of diagnosis. In Dr. Buzzard's case it was reasonable and likely to infer that the obstructing cause was *within* the gut, and there were no very definite criteria between obstruction so caused and that due to external conditions. Dr. Buzzard had acted on the belief that the obstruction was due to the abnormal contents of the bowel, and surely no surgeon would open the belly in such a case.—Mr. MARSH could not agree with Mr. Barker. When the Sayre's jacket is being applied the spine is elongated, and the thorax too, so that after the patient is let down the bandage is really tighter than before. He had had one or two cases where the bandage could not be borne, he believed, for this reason. He would ask the physicians whether such violent intestinal obstruction ever followed mere plugging of the gut.—Dr. COUPLAND was certain that such did occur in cases of fæcal masses, gall-stones, and the like.—Mr. BARKER said that when Sayre's jacket is applied the patient is suspended by the shoulders as well as by the head, and the capacity of the thorax is thereby increased. It was unsafe to suspend solely by the head.—Dr. H. HALL had recently met with a case of acute obstruction due to impacted gall-stone, which was found after fæcal vomiting and rupture of the ileum had occurred.—The PRESIDENT pointed out that a gall-stone entered into a different category as causing severe obstruction from a bolus of food as in Dr. Buzzard's case.—Mr. NOBLE SMITH had seen in Guy's Hospital, under the care of Mr. Golding Bird, a case of angular curvature, due to strain five or six years previously. As to intestinal obstruction being sometimes caused by food, he did not know of an instance in man, but cited one in a horse.—Dr. BUZZARD, in reply, read notes of the microscopical examination of the spinal cord, which exhibited myelitic changes in the lower dorsal region, and bands of secondary degeneration in the lumbar. There was no definite history of traumatism in the case, no evidence of struma, the man being perfectly healthy, but engaged in the laborious occupation of lifting heavy sacks. This and the other case he referred to certainly seem to confirm Professor Sayre's view. There was no ulceration of the bowel, only slight hyperæmia. Mr. Broster had informed him that in four out of twenty-two cases a Sayre's jacket could not be borne, and had to be taken off within twenty-four hours of its application; males seemed less tolerant than females. The defective peristalsis, owing to the paraplegia, and the enormous quantity of indigestible substance he had taken, surely justified the reasonable delay that under the influence of morphia and atropia the obstruction might pass away. He did not think the abscesses could have pressed on the spinal cord, their contents were so thick and inspissated. The canal was opened first.

Dr. SANGSTER read notes of a case of Molluscum Fibrosum, exhibiting the patient and also some sections of the growth. He is a man fifty years of age, small in stature, and he says that the tumours developed all over his body within twelve months, the first to be noticed being one on the lower end of the sternum. The face was attacked quite recently. The trunk is now covered from clavicle to loin with hundreds of molluscum tumours, as well as on the back, buttocks, and scapular regions, and on the limbs, the thighs being more affected than the legs; the sole of the right foot was the seat of one small tumour, another occurring on the hard palate. The largest growth was a pendulous mass the size of a Tangerine orange, to the right of the sternum. Dr. Sangster said that examination of the growths—many of which showed a central comedo-like spot—pointed to their origin in the dermal envelope of the hair-follicles and seba-

ceous glands, as Dr. Fagge had stated; the prevalent view, especially of Continental observers, being that the affection is one of the subcutaneous tissue generally—the glands, if involved at all, being secondarily affected.

The Society then adjourned.

ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.

AT the meeting of this Society on February 18th, 1880, W. A. N. CATTLIN, F.R.C.S. (President), delivered an address on the Relations between Dental Surgery and Medicine, of which the following is an abstract:—Allow me to express the gratification it affords me to know that, by the goodwill of the fellows of this Association, I have been elected to preside over the only Society of Dentists which has been formed in this country composed entirely of educated surgeons. I thank you for this honour, which is greatly increased by the fact that it has not been the custom for learned Societies holding their meetings in London to select a president who resides, as I do, in the provinces. I congratulate the Association on the success of its first dinner. The cordial manner in which our views have been supported by the very heads of the medical profession is, to say the least, encouraging. Another point of congratulation is that a fellow of this Society, and one practising our special branch of surgery, Mr. Imlach, now holds the office of President of the Royal College of Surgeons of Edinburgh. Mr. Hamilton Cartwright, in an interesting speech delivered by him at our late dinner, drew an analogy between the barber surgeons and the dentists of an early period, and spoke of them as distinct callings; but I shall endeavour to show that even then surgery and dentistry were one science. Both medical and dental science have had their days of darkness, error, and delay, and, indeed, if we may judge from recent discoveries, science, in its general sense, is only just expanding to the light of modern times. If we go back to the year 1815, when the apothecaries of England and Wales obtained their Act of Parliament, and began to remove the main obstruction to their progress, we shall perhaps find an example in them which we may imitate. Feeling their degraded position (for the physicians of that day scarcely condescended to consult with an apothecary), they set to work in right good earnest to improve themselves. The better men, whilst using the powers of their new Act to prevent empirical practice, instituted most creditable examinations, the severity of which was gradually increased until the Apothecaries' Licence became one of the best tests of medical knowledge. The public, as well as the medical mind, by slow degrees became convinced that medicine in its broad sense included surgery, and hence arose the superior class of general practitioners who now hold the double qualification. It is indeed curious to note how gradually every improvement in the medical profession has taken place, and how certainly every requirement has been supplied. Let us hope that the same good fortune may happen to ourselves. For some time past the great principle advocated by the London University of conducting one *thorough* examination as a test for both Medicine and Surgery within one portal has been growing into popularity, and the signs of the times plainly indicate that such a system is about to become the law. Thus far since the year 1815 the object of the Legislature has been, and now is, to consolidate the different classes of medical practitioners, and equalise medical education. It is much to be lamented that the Dentists Act should have passed just at this crisis, as it is a strange contradiction of the whole scheme. All was proceeding well with dentistry until the Dentists Act in 1878 fell like a withering storm, and cut it from the parent tree. Looking earnestly at the present position of medical politics, and the wide difference of opinion which prevails among different grades of dental practitioners, I am led to think that the hour of danger has arrived, and that this association will have an anxious duty to perform during the present session of Parliament. Hasty legislation has led to difficulties of a serious character. The Dentists' Register practically separates dentistry from surgery, and in my opinion is an error of the highest magnitude. Its blighting influence will be more apparent as time rolls on; for it will scarcely be believed that if a surgeon, who may or may not be a dental licentiate, declines upon principle to place his name upon the Dental Register, he is by clauses 19 and 28 of that Act deprived of the privilege of serving as an examiner upon the dental board of his own college, unless he sits as one of its surgical members, which is not likely. Probably this flaw is an oversight, and will be altered as soon as the mistake is pointed out. Our subcommittee appointed some time ago will watch the progress of the Medical Amendment Bills, and if possible prevent the abuse of medical titles. They will again urge the Legislature to forbid unqualified persons assuming the title of either physician or surgeon alone, *or in conjunction with any other word or words*. Still the question meets us at every turn, What further action ought this Society to take under existing circumstances? It is to be regretted that out of 5289 names which appear in the Dentists' Register, only 533 have given positive evidence of either a medical or dental education. If the Dentists Act be allowed to remain unrepealed, what security is there that practitioners of other branches of surgery will not apply for and obtain a similar statute? If the Dentists Act be repealed, and I heartily hope it will be, then to prevent a repetition of the evil it has been suggested that when the proposed conjoint examining board is formed a candidate should certify that, in addition to the ordinary examination of a medical practitioner, he desires to be examined particularly as to his proficiency in dental, ocular, aural, orthopædic, or any other branch of surgery, and if he shall show a thorough knowledge of any such branch, a certificate to that effect should be appended to his diploma, and he should be allowed to appear in the Medical Register as practising that specialty. If a little learning is a dangerous thing, and if it be true of all professions that he who is only half educated can only be half trusted, then the dental licentiates will be most unwise if they remain in their present anomalous position. I will, in my individual capacity, say candidly what course I think it would be wise to pursue in order to repel the serious charge which may now be brought against dentists, of being the first to sow the seed of discord, and of unnecessarily tearing a useful branch from the glorious old tree of medical science, and that, too, after its roots had been pruned, and just when its branches were about to be trimmed and gathered into harmonious unity by the conjoint scheme. I would, therefore, suggest that the worst clauses of the Dentists Act should be repealed, and that only enough of it should remain to authorise the registration of dentists who were in practice before August 1st, 1879, and such others as are not yet ripe for medical registration. All qualified practitioners now on the Dental Register I would carry as fast as I could to the Medical Register, and for the future adopt the scheme which has been suggested by my son, Mr. W. Cattlin, for the benefit of all specialists in any branch of either medicine or surgery. Should any of the "qualified" desire to remain on the Dental Register, to die out by effluxion of time with the "unqualified," I would leave them alone in their glory. It will, I am sure, be the pride of our Association to promote any good object, whether originated by ourselves or not, and especially to hold out the right hand of fellowship to those who, though differing from us in opinion on minor matters, may show a readiness to work with us for the general good.

THE HEALTH OF THE ITALIAN ARMY.

AT the opening of the Medicus Annus in the University of Rome, Professor Baccelli delivered an address, in which he indicated the deplorable condition of the Italian Army from a hygienic point of view, and urged the profession to leave no stone unturned until that condition was ameliorated. The total of the youth sent up by the conscription for the three years' service is (he said) 285,000, and of these 49,000 are rejected by the medical examiners for organic defects. Taking the other causes of exemption from service into account, 195,000 is the total of sound youth enrolled in the army. But when these join the ranks every 1000 yield 1001 to the sick-list during the year! and, as if this were not all, the mortality among them (picked specimens of young Italy) exceeds 11 per 1000. High time is it, therefore, that the Italian Government should interpose to keep

the successive generations of Italians from deterioration past all physical redemption.

The Medico-Statistical Report on the Health of the Army during 1877, compiled under the direction of Dr. Machiavelli, is just out. In that year the mean force of troops under arms was 196,192. The number of admissions into the civil and military hospitals, and into the military infirmaries, was 193,650—i.e., 987 per 1000 of the mean force. The losses due to incapacity for further service were 2468, or 12·57 per 1000 under arms. Leave of absence for convalescence was accorded to 6000, or 30·58 per 1000. These figures show, as compared with the preceding year, an improvement in the sanitary condition of the army—a diminution, in fact, of 14 per 1000 in the number of admissions into hospital, and of 2·56 per 1000 in that of those rendered incapable of service. The infirmaries attached to the corps received 108,494 men under treatment, and of these 16,919 were sent into hospital. The number of cures effected in the infirmaries has therefore been reduced to 91,575, or 467 per 1000. The mean of days passed in the infirmary was seven days for each.

The maladies cured during the year are classified under four heads—1st, medical, including 46,125 patients (235 per 1000); 2nd, surgical, including 30,125 patients (154 per 1000); 3rd, ophthalmic, including 7702 patients (39 per 1000); and, 4th, venereal, including 7636 patients (39 per 1000). The total mortality among the men under arms was 2072, or 10·56 per 1000. The mortality outside the military and civil hospitals and the military infirmaries was 461, and consequently the number of deaths occurring in the military infirmaries and in the military and civil hospitals was 1611.

The causes of death are specified in 2036 cases, and remained unknown in 36. The maladies which proved most fatal were: typhoid fever, 342; pneumonia and other diseases of the respiratory system, acute and chronic, 773; small-pox, 128; suicide, 86; malarial fever, 78. The deaths are thus classified: 121 inferior officers; 146 corporals; 1805 soldiers. The army also in the same year lost three generals, seven colonels, three lieutenant-colonels, ten majors, 32 captains, 31 lieutenants, and 17 subalterns. In all 103 officers, or 9·07 per 1000 of the army.

These, like all official statistics, come so late as to have lost much of their interest. They indicate to the War Department what provisions it must adopt for the amelioration of the soldier's condition in regard to food, lodging, and clothing, or in regard to the labours of the camp and the annual manœuvres, with the seasons in which they should take place. But they come, as already said, two years after the data they present have occurred, and if we allow the minimum of six months for the War Department to act upon them, the interval between the bane and its antidote robs the latter of its efficacy. And how serious the bane is must be evident from the enormous proportion of the sick—987 per 1000—and from the equally grave proportion of suicides—0·43 per 1000.

SCURVY AND THE PROPOSED ARCTIC EXPEDITION.

No fact in Medicine is more clearly established than that the exclusive cause of scurvy is the prolonged and complete withdrawal of fresh vegetables or fruits from the dietary of those affected; and that the administration of such articles, or their equivalent—lime-juice—in sufficient quantities, is effectual to prevent an outbreak of the disease or to remove it when it occurs. It is therefore a matter of surprise, as well as of regret, that we find so many naval commanders of ability and experience ignoring the evidence on this point that has so frequently and strongly been brought before them. It was proved in the clearest possible manner, in the report of the committee appointed by the Lords Commissioners of the Admiralty to inquire into the causes of the outbreak of scurvy in the recent Arctic Expedition under Sir George Nares, that the main purpose of the expedition was foiled on account of the outbreak of scurvy that occurred among the members of the sledging party; and it was also shown, in an equally conclusive manner, that the appearance of the disease was due entirely to the absence of lime-juice from the sledge dietaries. After the strong expression of opinion given on this point by the members of the Scurvy Committee, and testimony, not only of officers and men who had taken part in previous Arctic voyages, but of the Medical Director-General of the Navy, and, through the Royal Colleges of Physicians and Surgeons, of the most eminent medical authorities, we are surprised to learn that another Arctic Expedition is likely to leave our shores in which the use of lime-juice as a prophylactic against scurvy promises to be again ignored. Commander Cheyne, R.N., in whose hands the command of the proposed British Canadian Arctic Expedition is placed, speaking at the Mansion House on the 28th ult., is reported to have said: "The last expedition came back broken down with scurvy, and the reason was, not the want of lime-juice, but the want of proper ventilation between decks on board ship, and the want of fresh air and exercise." Good sanitary conditions undoubtedly enable men to withstand for a time the ill effects of long-continued deprivation of fresh vegetable food, but no amount of exercise, fresh air, or free ventilation will prevent an outbreak of scurvy when the salts supplied by fruits, vegetables, or lime-juice are reduced beyond the fixed physiological limit. Whatever views of his own, therefore, Commander Cheyne may have with regard to the etiology and treatment of scurvy, we trust that on the question of lime-juice or no lime-juice he will not be permitted to use his discretion, but that the Committee of Management will see that not only provision is made for its supply to every member of the crew throughout the voyage, but also that a guarantee is given by the Commander that it shall be administered. It would be intolerable, with the disastrous experience of the past so clearly before us, and in the face of the most complete scientific evidence that any disease has had brought to bear on it, if more brave men were sacrificed to ignorance and prejudice. That some such idea crossed the minds of many at the meeting is more than probable, as we find that one of the speakers, towards the end of the meeting, mentioned the fact that Dr. B. W. Richardson had undertaken to supervise the provisioning of the ship. This is reassuring, since we are convinced that Dr. Richardson will indicate all requisite articles, and issue adequate instructions on all particulars essential to the preservation of health among the crew. But in addition, as we before remarked, it is incumbent on the Committee to secure from Commander Cheyne a written pledge that the sanitary and dietetic instructions issued to him shall be carried out completely.

The task, however, undertaken by Dr. Richardson is not an easy one. So long as the men are confined to the ship the diet can be varied, and no difficulty need arise with regard to a sufficiency of lime-juice; but when the men leave the ships, the question as to portability at once suggests itself. With regard to lime-juice, we cannot help thinking that great advantage would be derived from the substitution of concentrated preparations of lime- or lemon-juice for the crude juice generally issued. Of course it would be necessary to test its efficacy as compared with that generally in use. The physicians at the Dreadnought Hospital, Greenwich, could no doubt speak as to this point, or afford facilities for the test being made. In making a trial of lime-juice in a concentrated form, we would suggest that the evaporation be effected at low temperatures, certainly not above 100° F. Extract of malt also is very portable, and Dr. Ralfe has shown by experiments at the Dreadnought Hospital that it possesses considerable antiscorbutic properties. It might take the place of one ration of tea in the twenty-four hours, though, as its effect on the nervous system is not equal to the latter, it could not entirely replace it. Finally, some glass frames that could be packed and stowed away during the voyage might be taken and set up when the ship went into winter quarters. By means of these frames the crew could be supplied with a constant succession of fresh salads of the hardy kind, a double ration being served out to men destined for sledging, a fortnight before they started. Sufficient warmth for these miniature greenhouses could be obtained by utilising the waste heat of the between-deck stoves.

THE LANCET.

LONDON: SATURDAY, MARCH 6, 1880.

THE friends of medical reform must lose no time and abate nothing of their energy, if the labours of the Select Committee are to end in a satisfactory measure. The Committee met on Monday to choose a chairman and to consider the course of proceedings. We intimated some time ago that there was a doubt whether Mr. FORSTER would again accept the office of chairman. We regret to say that at the meeting on Monday Mr. FORSTER, in a letter, expressed his inability to accept the duties of the chair during another session. Lord GEORGE HAMILTON was appointed chairman. The Vice-President of the Council will, of course, bring to the work considerable knowledge of the questions at issue between the defenders of the existing system and those who are gravely dissatisfied with it, but his other labours last session were such as almost entirely to prevent his attendance, and a member of a committee, like a judge, labours under a great disadvantage who does not hear and see witnesses for himself. It can scarcely be hoped that Lord GEORGE HAMILTON will have much more leisure this year than he had last, in which case it is understood that the duties of the chair will devolve on some other member of the Committee who may chance to be present. We cannot help regretting this. Much of the value of such an inquiry as that now going on depends on the continuity of the presiding member. This being secured secures a continuity and order in the investigation itself which is very apt to fail under other circumstances. We must, however, hope that Lord GEORGE HAMILTON'S acceptance of the chair will enhance his interest in the whole question, and his wish, for its own sake and for the sake of the Ministry of which he is an able member, to see it well settled, as a part of this year's domestic legislation.

We understand that the Committee will meet on Monday next to take evidence, and that it has determined then to hear further witnesses from the Universities of Aberdeen and Glasgow. We look forward with much interest to their examination. It is quite clear to us that the Scotch Universities have nothing to fear from the creation of a good examining board by each division of the kingdom, and of a properly constituted Medical Council. There can be no difficulty in reconciling the universal demands of the profession for reform in these matters with the interests of institutions which were never more effective or prosperous as teaching institutions than they are now. It is said that Sir WILLIAM GULL is anxious to be examined. There can be but one opinion about his personal claims to consideration; but it is time to ask if every member of the Medical Council is to be examined. Already a third of the entire Council has been examined, including Dr. ACLAND, Mr. SIMON, Dr. QUAIN, Sir JAMES PAGET, Sir DOMINIC CORRIGAN, Dr. HAUGHTON, Professor TURNER, and Dr. ANDREW WOOD. Surely this implies that the case for the Council has been amply heard already, and that the scanty time of the Committee should now be given to hearing representatives of institutions which may feel aggrieved by proposals of reform, and to hearing further witnesses on behalf of those changes which the profession almost unanimously demands. There are members of the profession whose evidence has not yet been taken, but which would be of the utmost interest and value; but who are so absorbed in professional duty that they are not likely to volunteer their evidence, and might even have to be pressed to give it. Surely this is the kind of evidence that is now wanted. The members of the Council, including Sir WILLIAM GULL, have been discussing this question for ten years. Their opinions have been recorded over and over again. Sir WILLIAM GULL lately said he had had twenty different opinions on the subject himself, all of which have had ample publicity. It will be lamentable if the time of the Committee is to be so occupied in hearing a mere repetition of arguments and views which have had already such ample statement both in the Medical Council and before the Committee. We must appeal to the Committee to put some limit to the examination of members of the Council, and to endeavour to procure the evidence of some outside and independent witnesses, such as Sir WILLIAM JENNER and Dr. ANDREW CLARK, whose knowledge of the profession and of its wants must be unsurpassed, and who have not been warped by officialism into the belief that medical corporations are greater than the medical profession.

We feel confident in the spirit of fairness and in the earnestness of the Committee; but time is short, and officialism is strong. It behoves the friends of medical reform to consult together to bring reasonable pressure to bear on the Committee to hear witnesses who really represent the profession.

MR. DILLWYN'S proposal to reform the laws relating to lunatics has, probably, little in common with the measure of consolidation and amendment promised in the QUEEN'S Speech; and it would be convenient to defer criticism on the subject, as a whole, until the Government Bill is before Parliament and the country, but that it may help to save time and space hereafter if we say now what it seems desirable should be said on the scheme of the member for Swansea. We have already stated our own views, and urged the considerations by which they are supported. It is therefore evident that we cannot regard the scheme, issued just as we were going to press last week and then briefly summarised, as satisfactory. It is broad to the extent of impracticability in some respects, but narrow and inadequate in others. Nevertheless, the public and the medical profession have cause to feel grateful to Mr. DILLWYN for having brought the question of Lunacy Law Reform prominently before Parliament, thus rescuing the question from the hands of agitators, while, first by the Select Committee he procured, and since by the Bills he has drafted, supplying the Legislature with sound and useful hints as to what it may be desirable to do and what to avoid.

Our primary objection to the scheme was stated in the few remarks we were able to append to the epitome which appeared in our last issue. The measure is *permissive*, and the option allowed the parties charged with putting the pro-

posed Act in motion—namely, the justices of counties and boroughs—is of a peculiarly mischievous character. They may raise money to purchase the existing licensed houses with the business accruing to them, at a fair valuation for property and goodwill; or they may employ the money so raised to establish and inaugurate, in commercial opposition to the asylums carried on by private individuals, a new class of institutions, which will be, in fact, equally private, but the trade enterprise of the justices. Of course, the justices will not personally benefit by the success of their business; but it is contemplated that they shall make a profit by "keeping madhouses," and the funds so accumulated are to be appropriated to the reduction of the rates for the maintenance of pauper lunatics. Stripped of its technical verbiage, the proposal is simply this: as a remedy for the alleged abuses of private asylums conducted for gain by private persons, the justices of counties are to be empowered to embark in a similar enterprise; and, which makes the proposal the more remarkable, whereas every precaution is deemed necessary to prevent the proprietors of licensed houses from entering into collusion with the licensing authorities, with the inspectors who visit their establishments, or with the medical men who certify the insanity of their inmates, no precautions are deemed necessary for the supervision of the business carried on by the justices, beyond a biennial visit by the Commissioners. The justices, because they are justices, are to institute houses without the consent of any authority; and they are, moreover, to control the licences of their opponents in the competition for public favour. They are to make all Orders for the admission of lunatics to asylums—their own and those of their competitors; and their powers generally will be so extended that, in addition to having unlimited capital at their back, they will be able to clear the field of all opponents. Is it conceivable that, under these conditions, the clause empowering justices, "if they see fit," to purchase the property and goodwill of the existing proprietors, should be anything but a dead letter? It is, in fact, mere surplusage to provide for buying up the present licensed houses, when the Bill would empower justices to establish new institutions at less cost. Any measure of reform to be satisfactory and successful must provide for the compulsory purchase and sale of the existing private asylums.

It may be alleged that considerations of profit could not possibly influence the justices of a county or borough, because the gain is not *personal*. Such a contention overlooks the pertinent fact that nothing can be so dear to the heart of an honorary manager of public funds as success in "saving the pockets of the ratepayers," and if the profits made by keeping "private asylums" are to be applied for the reduction of the rates levied for carrying on pauper institutions, we can conceive of no "motive" more powerful for filling the paying establishment with inmates, and keeping them in custody as long as possible! The sole consideration which presses on the public mind is the fear that private proprietors study their own financial interests in preference to those of the insane. We utterly fail to see what consolation can be derivable from the fact that if this Bill becomes law the ground of fear will be so far varied that henceforth it must be the justices who are suspected, and the interest to be promoted at the expense of the paying patient will be the reduction of the local rates. As matters now stand, there is the feeling that if the friends of a lunatic are careful they may avoid the influence of any person who has an interest in filling the private asylums and keeping them full. Under the new system, the managers of the public asylums for paying patients, the persons who are to stand in the place of the proprietors, and make a profit out of the enterprise—not, it is true, for their personal gain, but for that most pressing of all objects, public or rather *local*, economy—will have the amplest opportunity of exercising any influence they may please to exert in favour of the public asylums and the rates, as they, the justices, are to sign *every* Order of admission.

The transfer of the licensed houses of the metropolis to the control of the justices, themselves interested keepers of the public institutions, is also, unless we are much mistaken, a proposal of the greatest gravity. For many years past it has been apparent that the growing power of the justices in public asylums has been disastrous, crippling medical work and throwing an insurmountable obstacle in the way of methods of treatment and systems of management which the progress of medico-psychological inquiry has rendered desirable. The magistrates of Middlesex and Surrey have been felt to be a dead weight on the medical enterprise of improvement. It is obvious that the collateral effect of handing over the licensed houses in the metropolitan district to the jurisdiction of the justices—taking them out of the control of the Commissioners—must be to augment this evil, by increasing the influence of the magistracy. We have always contended that the powers of the Commissioners should be both enlarged and strengthened, and that, in place of recommending, they should be armed with authority to enforce their directions. The new proposal is wholly antagonistic to this policy, and we cannot but oppose it. Again, there does not appear to be any sufficient reason for adding to the number of the Commissioners, if they are to be less influential than they now are. Least of all should the proposed increase take the form of appointing a paid chairman and vice-chairman, if the judicial, in fact, the licensing, business of the Board, is to be transferred to the justices. To speak frankly, we should have thought that the honorary members of the Commission—men who have served the office of Commissioner and retired on a suitable pension—might have been willing to discharge the not very arduous duty of presiding at the meetings of the Board without additional remuneration! The Earl of SHAFTESBURY has so perfectly organised the official machinery of the Commission, and placed its deliberations on such a footing, that when this noble lord—the father of the whole system of legal protection for the insane in England—resigns the chair, it will be a coveted honour to take up the work where he has left it. Of course, as outsiders, we cannot be supposed to know what the duty to be discharged really is, but it certainly seems startling to be asked to sanction two new salaries for chairman and vice-chairman without any increase of work which can fall on the president of the Board, more especially at a time when the practice of retaining ex-commissioners as honorary members of the Board has been fairly inaugurated. If any increase of strength is necessary, it would seem to be most urgently needed in that section of the Board which consists of the comparatively vigorous men engaged in visiting the asylums

It is clearly necessary that the duty of supervision by personal inspection should be increasingly well performed. Visits paid with tolerable regularity, once every year or fifteen months, are not sufficient. We cordially approve the clause of Mr. DILLWYN'S Bill which provides that all asylums shall be inspected at least *twice* a year. It would be still better if the visiting could be even more frequent. A radical change is necessary in the *manner* as well as the number of the inspections carried out by the Commissioners; and it is not easy to see how any substantial improvement in this respect is to be effected by the appointment of a paid chairman, who must be understood to remain principally at home.

It is not worth while to discuss the Bill in its relations to the subject of "certifying." We do not see that safety will be increased by requiring a justice to sign the Order for admission. That plan has, we believe, been tried in America, and it certainly does not render the alleged lunatic more secure against the mistakes or malevolence of those around him. How should it do so? No lay magistrate can form an independent judgment. His "order" must be signed on the ground of the medical certificates. It is to *these* the public must look if they desire to be safe. We have declared for an official certificate by a salaried officer. The clauses enabling a person of weak mind to enter an asylum as a voluntary boarder, and empowering any two persons interested in a lunatic to apply for the admission of two medical men to examine him, are likely to be useful. As a whole the Bill may be regarded as supplying the outline of a measure which may attain the object in view, but it will need to be amended, considerably, in detail when in Committee, and this stage being reached we shall have more to observe. Meanwhile let us say again, as we have said so many times before, that a sweeping measure of reform is the most likely to succeed. In short, what should be done is precisely what has now at length been proposed for the assumption of the business of the water companies—namely, the creation of public stock for which the enterprise shall be transferred to the State, and carried on under constant supervision, and with a single eye to the general good. The monetary scheme proposed by Mr. CROSS for the purchase of the water companies originated with Mr. R. H. PATERSON, a member of the Council of the Statistical Society; and it was published in his "Economy of Finance" some twelve years ago. Its applicability to the purchase of "private asylums" is fully as obvious as to that of the business of the water companies, for which it was first devised.

THE vote to be proposed for the expense of "the medical establishments and services" of the Army for the year ending 31st March, 1881, amounts to £308,440, being, as stated in the estimates, a "net increase of £42,258" upon the sum taken for the current year. But an examination of the details shows that about £20,000 of this excess is due not to an increase in the expenditure, but to a transfer of charges from other votes. Thus the allowance to probationers at Netley, heretofore charged to the vote for establishments for military education, now appears under the head of "pay of medical department," and the free hospital ation to the men of the Army Hospital Corps, which formerly was included under the vote for "provisions, &c.," having been commuted to a money allowance, is included in the departmental pay of the corps. The rest of the excess arises chiefly from the additional number of medical officers employed, and from the increased pay and allowances granted by the new Warrant. We shall give a brief analysis of the various charges as shown in the estimates. As regards the *personnel*, there will be an increase of one Deputy Surgeon-General (in Ireland, replacing one reduced last year), twenty-four Brigade Surgeons, one Surgeon-Major or Surgeon, and forty-eight Acting Medical Officers. The latter are, we presume, "the medical officers on the retired list, and medical officers of the militia on the departmental list, whose regiments are not embodied," whose employment is authorised by the forty-ninth paragraph of the new Warrant. The amount required for the pay of the medical officers at home is £181,435, and in the colonies £53,734, the former being £39,367 above, and the latter £606 below the sums voted for the current year. Of the increase, £18,435 are required for the additional number of Acting Medical Officers, £5120 for the Surgeons on Probation, and the remainder is chiefly for the higher rates of pay granted by the new Warrant. In addition to these sums must be taken £9000 for the pay of militia surgeons, being £2000 above the preceding year, an excess due, probably, to the determination of Government to call out the militia for twenty-seven days' drill, instead of twenty as last year. The charge for "pay of civilian medical practitioners and medical bills" at home is put down at £7910, being an increase of £2455; this appears to require some explanation, for with the increased establishment of medical officers we should have anticipated a considerable reduction. In the colonies there has been a very marked decrease under this head, amounting to £12,930. This has been entirely the result of the termination of the war in South Africa, and the discontinuance, in consequence, of the services of civilian medical practitioners, who were there employed. The departmental and extra duty pay of the Army Hospital Corps, and miscellaneous labour, amount to £22,029, as against £5755 in the last estimates. With the exception of a slight increase due to the addition of 200 men to the strength of the corps, this difference is caused, as already explained, by the transfer of a charge from the vote for "provisions" to that for "departmental pay." A saving of £1083 is shown in the pay of clerks and other civilian office subordinates, whose duty will probably be, in future, performed by men of the Army Hospital Corps. The estimated cost of medicines and surgical instruments is £23,000, the same as in the last two years.

We regret to observe that the medical department is still charged with the expense of the military staff at Netley, which is retained there, we presume, on account of the time-expired men. We have repeatedly called attention to the injurious effect of having these idle men attached to such an establishment. No occupation is, or can be, found for them, and they do no good to themselves or the service, but demoralise the whole place. We would press upon the consideration of Colonel STANLEY the propriety of removing this depôt from the great invalid hospital of the Army. The time-expired men would be much better with the depôts of their corps, where

discipline could be kept up, and where they could be efficiently looked after and employed till the date of their discharge. We sincerely trust that the Secretary of State for War may see his way to getting rid, and that speedily, of such an anomaly as a military depôt within the precincts of an invalid hospital.

THE abortive "Noxious Gases Bill" of 1879 has been re-introduced as the "Alkali Acts Amendment, &c., Bill" of 1880. The first draft of the latter is now before us, and we have compared it carefully with its predecessor, the main provisions of which were recently described in these columns. The new Bill is better drawn than the old, and several slight modifications have been introduced into it, but its main features are the same, and we therefore most heartily hope that it will pass into law.

The Bill is essentially an extension of the Alkali Acts, which have stood so well the test of practical working. A large number of the factories which emit noxious gases, but which yet are not alkali works, are included in its operation, are compelled to register, and to submit at all reasonable times to the visits of the alkali inspectors, who have power to take proceedings against them if they infringe the regulations. The factories are classed under three heads: the alkali works proper, whose owners are to limit the escape of acids in the manufacture of sulphuric acid, and to avoid the nuisance arising from alkali waste; the sulphuric acid, nitric acid, chemical manure, gas liquor, and coke works, which in respect of sulphuric acid are treated like alkali works, but of which the owners have otherwise only to use the now proverbial "best practical means" for the abatement of their nuisances; and, lastly, a large class of metal, cement, and other works, which are even less stringently dealt with, special provisional orders of the Local Government Board, confirmed separately by Parliament, being required for the restriction of the nuisances of each separate manufacture.

These are the main provisions of the Bill. It is a somewhat timid and professedly tentative attempt to diminish the evils complained of by extending the system of registration and inspection. We fully admit the difficulties of the experiment, and should be sorry to be compelled to advocate any measure that might cripple important industries. Probably the experiment is the wisest that could be tried at the present time, and we think that, if it be fairly tried, it will shortly be found that more stringent regulations are possible. Improved means of fume condensation have frequently been suggested, and several recent inventions are said to yield good results. The stimulus of necessity will soon bring success, and this stimulus will be supplied, to some extent at any rate, by the proposed Act.

Up to this point there is no substantial disagreement between the manufacturers and the public. The manufacturers fully admit the existence of evils, and have, as a body, shown throughout an honourable desire to lessen them. Many of them have spent large sums in the effort to reform, partly, no doubt, from fear of prosecutions, but also with the honest desire to avoid inflicting annoyance on their neighbours. They profess themselves willing to open their works, when they are not already opened, to Government inspectors of sufficient knowledge and known impartiality, and to pay any penalties fairly imposed upon them; but they draw a line here, and decline to submit to any similar powers vested in the hands of local authorities or private individuals, possibly prejudiced, and almost certainly ignorant. Frankly, we cannot wonder at the objection, for our experience of local authorities has not inspired us with any blind belief in their wisdom. The public, however, who suffer annoyance, and sometimes loss, from the manufacturers, are entitled to be heard in the matter, and there are not wanting many, whose opinions carry great weight, who allege that the proposed extension of the powers of the Local Government Board to its inspectors would alone do but little to remedy their grievances. They would even prefer to leave matters as they are a little longer, rather than see the Bill pass without at least one clause granting power to individuals or sanitary authorities, or both.

This brings us to the disputed clauses in the two Bills. In the Bill of last year a proviso was inserted (Clause 27), by which a sanitary authority, after trying unsuccessfully to induce the chief inspector to take action against a factory charged with infringing the Act, might have taken proceedings in the County Court on their own account, and, if successful, have obtained a prohibition of the nuisance. It is unnecessary to discuss this clause now, as it is so completely altered in the new Bill, that the objections of the manufacturers no longer apply. Under the new clause (29) the local authority has only the power of complaining to the Local Government Board, who will then be compelled to institute an inquiry, and either direct proceedings to be taken or punish the authority which has complained without cause, by making them pay the incidental expenses.

The other clause, formerly the 29th, now the 30th, deals with what are called contributory nuisances. It enables "any person" injured by a nuisance arising from the joint acts or defaults of several persons to proceed against them jointly or severally, and recover damages from each in proportion to the contribution of each to the nuisance. This power, as regards money losses, is already possessed at common law under a clause in the new Judicature Act, as has recently been proved by an important trial before Mr. Justice LUSH at Newcastle (Charlton *v.* Russell and others), but such a trial involves great expense, and it appears doubtful whether this one decision would be found to govern all cases.

It is, then, over this clause that the battle must be fought. The arguments in its favour were well stated by Lord DERBY at the recent deputation to Mr. SCLATER-BOOTH, while its opponents could have found no better spokesman than Mr. E. K. MUSPRATT, who, on the 25th ult., read a remarkably able paper on the subject to the Society of Arts at a meeting, presided over by Mr. J. C. STEVENSON, M.P., and consisting to a great extent of chemical manufacturers, many of them among the most celebrated in England. Space forbids us to state the arguments, *pro* and *con.*, in detail. We must be content with expressing our opinion, formed after very careful consideration, that the clause may be surrendered without serious injury to the Bill. It is true that the "joint and several" remedy is, in some form or other, necessary for the

protection of the public, and that such a remedy should be obtainable without ruinous expense to the aggrieved party. But the opportunity which the present Bill affords of trying the important experiment of extended inspection is one that should not be allowed to escape, as it will certainly afford, in time, a basis for further legislation, and there is really little chance that a measure, seriously opposed by so influential a body as the chemical manufacturers, can pass in such a busy session as this is likely to prove.

We may add that the clause is quite out of harmony with the rest of the Bill, which elsewhere deals with penalties to be paid to the Exchequer, and not with damages to be awarded to individuals.

Annotations.

"Ne quid nimis."

THE CHARTER OF THE VICTORIA UNIVERSITY.

THE draft Charter of the proposed Victoria University of Manchester has been issued, and its provisions are substantially the same as those contained in the draft scheme which received the sanction of the Privy Council during the last session. The Charter provides for three governing bodies—viz., the Convocation of the University, the University Council, and the University Court. The Convocation will consist of the chancellor, vice-chancellor, professors, lecturers, and registered graduates of the University for the time being; and all graduates of three years' standing shall be entitled to register. A meeting of Convocation is to be held at least once in every year, and any question may be decided on if thirty members at least are present; but, as in the case of the University of London, its powers are exceedingly limited, and the superior authority is not bound even to take its discussions and decisions into consideration. It elects, at first, four members to the University Court, and this number may be gradually increased to seven, and then to ten, or even further with the consent of the Lord President of the Privy Council. It will also have the power of electing the chancellors of the University, after the first; and the chancellor, in his turn, nominates three members of the Court. An exceptional privilege granted to members of Convocation is that they may be present at the meetings of the Court, subject to any exceptions and regulations prescribed by the Court. If this clause be liberally interpreted by the higher authority, as doubtless will be the case, it will be a great boon to the graduates, and make the deliberations of the Court of much interest to the junior members of the University. The University Council is the executive body of the University, and may exercise such of the powers as the statutes of the Court direct, except the admission or exclusion of a college to or from the University, and the election of a vice-chancellor or members of the Court. Due provision is made for an appeal to the Court against the acts of the Council. The Council will consist of (1) the chancellor; (2) the vice-chancellor; (3) six members of the University Court appointed by the Lord President of the Privy Council; (4) two other members of the Court chosen by the Court from amongst those members elected by Convocation; (5) four other members chosen by the Court itself; (6) the president and chairman of the Council, and the principal or other chief academic officer of each College in the University; and, lastly, such of the Professors of the College in the University as are members of the Court by virtue of the choice of the senates or academic boards of the several colleges. We attach more importance to the constitution of the Council than to any other part of the charter, and everyone interested in the future of the University will appreciate the thoughtful and liberal manner in which the various interests are represented. Crown nominees, members elected by Convocation, by the Court itself, and more especially the professors and heads of colleges, all have places. It is the exclusion of the last-mentioned element, except by a chance nomination of the Crown or election by Convocation, that constitutes the weak point in the Senate of the University of London, and which has already caused, and must cause, grievous dissatisfaction. The University Court is the highest authority, and to it is entrusted all matters concerning the University, but it is expressly stated that it shall not be lawful for it to impose any test whatsoever of religious belief or profession. The Court will consist of the Duke of Devonshire as Chancellor of the University; J. G. Greenwood, LL.D., the Principal of Owens College, as Vice-Chancellor; the Archbishop of York, the Marquis of Ripon, the Earl of Derby, Lord Frederick Charles Cavendish, Baron Winmarleigh, and the Bishop of Manchester, as life members; Mr. W. E. Forster, M.P., the Rev. Mark Pattison, and Dr. Joule as members for six years; Dr. Gott, Mr. E. Baines, and Mr. W. Bowman, F.R.C.S., as members for three years. On the death or resignation of any of the above, or at the expiration of their term of office, the Lord President of the Council will fill up the vacancy. The other members of the Court will be the three nominees of the Chancellor, four others elected by Convocation, and the representatives of the Colleges, and these are to hold office for not less than three nor more than twelve years. The Colleges will be most fully represented by their presidents, chairmen of council, principals or chief academic officers, as well as by not less than two or more than four of their teaching staff, and not less than four, or more than twelve, chosen by the governing board of every college. Owens College naturally takes precedence, but due powers are given for the admission of other colleges, and the number of Yorkshire representatives on the Court is evidently intended to at once secure admission for the Yorkshire College of Science. All examinations are to be conducted jointly by external examiners and by examiners who are professors or lecturers of the University. Full freedom for the admission of women is maintained by the University, but inasmuch as degrees can only be obtained after collegiate study, each college may take its own line of action in the matter; and hence, whether this privilege be made full use of, or be rendered inoperative, is entirely beyond the discretion of the University. Degrees in Medicine or Surgery are expressly excluded, unless and until authority in that behalf is given by further charter, or by Act of Parliament. We shall look with great interest for the regulations which the new University considers necessary that the students of Owens College, and the other Colleges which may join it, must observe before being allowed to present themselves for degrees.

SMALL-POX STAMPED OUT.

THE beginnings of small-pox in a parish are an occasion for showing the stuff of which a medical officer of health is made. If he is worthy of his office, and if he has a vestry equal to its functions, he can save the community hundreds of lives and thousands of pounds by timely removal of the first cases to hospitals, by house-to-house visitation in the infected streets, and by inspections of children in schools. If he is not worthy of his office he will not look near the infected houses; he will ply no influence with stricken families; he will take his information from the newspapers, or the registrars of health, and content himself with issuing large posters on the efficacy of disinfectants and rhetorical reports for the vestry, until the epidemic is past all control,

and sanitary law and medical science are alike discredited. The recent outbreak of small-pox in St. Pancras fortunately has been met by a vestry and a medical officer of health answering to our first description, and up to this time it would seem to have been stamped out. Mr. Murphy, in a recent report to the guardians, describes the first cases as occurring on the 5th and 6th of January in Brunswick-grove, and being removed on the 9th to the hospital. They were infected by cousins living in Islington, where sixteen cases were known to have occurred in November. Ten or twelve cases more occurred in Brunswick-grove, and were removed. Between Feb. 5th and 16th fourteen other cases came to Mr. Murphy's knowledge, twelve in Brunswick-street and two in Brighton-street, and were at once removed. Three medical visitors were sanctioned by the vestry, and a house-to-house visitation of the infected district was made. Many susceptible persons were discovered and vaccinated by Dr. Claremont, public vaccinator, to whom and to Dr. Smith, the district medical officer, Mr. Murphy paid a well-merited compliment for their prompt co-operation. He himself received the formal thanks of the vestry, which is to be congratulated on having not only a good officer but the power to appreciate and take his advice. After writing his report there were six other cases. But Mr. Murphy, at the time of the meeting at which his report was read, believed the whole thing was at an end.

THE DEAD-LOCK AT GUY'S.

THE dispute which has arisen between the medical staff and the treasurer of Guy's Hospital is a most unfortunate one, and is likely very seriously to interfere with the well-being of one of the most important of our medical charities and medical schools. The staff are unanimous, and the treasurer stands alone. The contention at present is of twenty against one; and without prejudice to the question at issue, we may say that it is a strong argument against the constitution of Guy's Hospital that it has been possible for such a dispute to arise. The idea of a layman, presumably without any special knowledge of nursing or doctoring, having power to run counter to the unanimous opinion of a staff of twenty eminent members of the profession seems incredible. The treasurer having made a sweeping alteration—we will not call it a reform—in the nursing system without first consulting the medical officers, meets a protest on the part of the staff with an expressed determination to stand to his guns, and accordingly a full meeting of the governors has been called to arbitrate between their representative on the one hand, and their tried and faithful servants, the medical staff, on the other.

Such an event is without precedent in the annals of Guy's Hospital, and it is to be hoped that a full statement of the opinions of the staff and of the treasurer will enable the governors and the public to calmly consider the merits of the case. We gather that the staff fear the "ward system," which has been that in vogue at Guy's Hospital, will be done away with, and another substituted, in which the interests of nursing as a craft will be made superior to the interests of the patients and the students, and that the thoroughly competent nurse, who hitherto has been supreme in her own ward, and who is well versed in the views as to treatment which are held by the physician or surgeon under whom she serves, will give place to a constantly shifting "sister," who is in all things subordinate to the "lady superintendent." The treasurer, we believe, has replied to these allegations of the staff, and has assured them that their fears are groundless; but any impartial person who is capable of reading between the lines will see that, although the staff may have overstated their case a little, the treasurer has also overstated his, and that there is good reason to believe that the "ward system" under the new régime cannot be the same thing as it has hitherto been. As to the value of the ward system, we have no doubt whatever, and we are sure that it is greatly to the advantage of the patients that a nurse should be to some extent a specialist, and should devote herself to one class of cases—medical, surgical, obstetric, or special. The position of a head nurse at Guy's ought to be so good, and her independence ought to be so assured, that women of fair education, thorough nursing capacity, and undeniable respectability should be found in plenty to fill it. We would remind the governors that nursing is not a sentimental matter, but a business, just as cooking, shop-keeping, or teaching is a business. We would also remind the governors that it is a matter upon which the medical staff are better able to give an opinion than any number of ladies, who are far too prone to look only to the sentimental side, and to think that a woman who is sober, obedient, religious, and genteel is necessarily a good nurse. This is not by any means always the case, and it is undeniable that the strong, homely woman of the lower classes, who as a nurse is going out of fashion, often possessed qualities of value which are looked in vain for among many who take up nursing rather as a "sacred calling" than as a matter-of-fact business.

It is in human nature to love independence, and the legitimate ambition of a young woman who takes up nursing as a calling is that she may some day rise to the position and independence of a head nurse; just as a kitchenmaid dreams of some day being a cook, or even a housekeeper. Under the modern system this ambition is never gratified, since the officers and petty officers are seldom recruited from the ranks; and the really clever, skilled woman has often the mortification of finding herself under the control of a lady-tyro who has a maximum amount of sentimental enthusiasm with a minimum of common sense.

We hope the governors, before they arrive at the fatal decision of running counter to the deliberately expressed and unanimous opinion of their medical staff, will at least take some pains to find out what the modern system is elsewhere; although we warn them that much skill is often shown in concealing its defects; the chief of which is that the nurses do not stop, and after using the hospital merely as a school quit it to practise their "profession" for themselves. They prefer being "farmed" by the proprietor of a nursing institution, where, when actually nursing, they enjoy absolute independence, to remaining in a position of rigid subordination at a hospital.

TRICHINOSIS.

LORD THURLOW did good service the other night in asking when the report of the Government Inspector, who had been commissioned to inquire into the circumstances of the alleged outbreak of trichinosis on board the *Cornwall* reformatory school-ship, would appear. The subject is one not merely of professional interest but affects both the sellers and consumers of cheap American and other pork. The symptoms of trichinosis and the anatomical appearances met with after death, are tolerably characteristic, so that it would not be difficult to determine the presence or absence of the parasite in any given case. Since the alarm has been raised it is only natural that persons interested in the matter should be informed of the facts on which it was based. What the public wants to know is whether an outbreak of trichinosis has occurred, as alleged, from the use of American or other foreign pork, and if there is evidence to show that the meat was sufficiently cooked before it was served out. Considering the period that has elapsed between the first commencement of the outbreak and Lord Thurlow's question, the Government by this time ought to have been prepared with some definite answer. Till Government gives some information on this important

subject, we would advise the public to be particular in seeing to the careful cooking of all American and German pork, bacon, or ham that they may purchase. Opinions differ as to the temperature necessary for the destruction of the trichinæ, but experience shows that thorough cooking confers an immunity from the disease. This probably explains the circumstance why persons who apparently have partaken of the same trichinous pork are not equally affected, some having eaten the well-cooked, others the underdone, portion of the meat. In North Germany, where the people eat raw ham, sausage made from raw pork and but slightly smoked, and even raw-chopped pork itself, several severe outbreaks of the disease have occurred; but in Southern Germany, according to Niemeyer, where the people dislike raw flesh, and even pickled and smoked ham and sausage, not a single case of acute trichina poisoning has been reported.

COLONEL STANLEY ON THE ARMY MEDICAL DEPARTMENT.

IN bringing forward the Army Estimates on Monday night Colonel Stanley adverted to the very different position in which the Medical Department stood this year as compared with last. Thanks to the liberal terms of the new Warrant students of a better class than those brought into the army of late years had come forward for admission. In the two examinations held since the promulgation of the Warrant 118 candidates presented themselves, of whom 107 were accepted. He was glad to say that, although he was "fully aware that no one in this world can please everybody, there is a great concurrence in favour of the Medical Warrant as it now stands." He took the opportunity of bearing testimony to the efficiency, zeal, and self-devotion of the medical officers in South Africa and Afghanistan, remarking that of this there is even melancholy evidence in the large numbers who have succumbed to hard work, especially among the Indian forces. He drew especial attention to the loss the army medical service and the medical world in general had sustained in the death of Dr. Porter at Sherpur, "an officer whose arrangements for all the medical duties of the campaign left nothing to be desired." He died leaving behind him "a reputation to which his friends may look back with satisfaction, and a memory which will be dear to all who knew him." Colonel Stanley also called attention to the very satisfactory manner in which the ambulances were organised and worked under Surgeon-Major Hector in the attack on Secocoeni's camps, quoting from a letter written by Colonel Brackenbury: "It was a sight to see, for I suppose it was the first action fought by our troops in which it can be said that not a single *fighting* man left the ranks to move the wounded to the rear." He also stated on the authority of the Principal Medical Officer that "so efficiently and rapidly did the bearer corps perform its duty that no wounded man was left two minutes on the ground before he was taken to the dressing station." Colonel Stanley alluded to the permission granted to medical officers to exchange, to the restoration of forage to the department, and to the provision made for the employment of a number of officers on the half-pay list at certain stationary posts, as being important boons secured by the new Warrant.

Having disposed of the candidates and medical officers, Colonel Stanley proceeded to make some remarks on the health of the army, and here he must have been either very incorrectly reported, or very badly coached up; we are disposed to think the former from the tenor of his remarks. The statement of the sickness and mortality, as reported, is so obviously wrong, that it would be useless to quote it. He concluded his remarks on Vote 4 by noticing the marked improvement of the health of the troops in Cyprus, and stated with reference to the 42nd and 71st Regiments, which suffered so much in that island, that their health is now good in all respects, and that since they left Cyprus "they have had an entire immunity from malarious affections." The latter statement, however, scarcely accords with a previous remark, that the increased sickness at Gibraltar "is stated to have arisen from the prevalence of paroxysmal fever among the troops sent thither from Cyprus."

THE PATHOLOGICAL SOCIETY.

THE Council of the Pathological Society has decided to try to direct the attention of its members especially to certain given subjects which particularly require elucidation, and for this purpose has appointed a committee, which will publish a list of specimens it seeks to have exhibited and of subjects to be more especially worked at. The idea is good, but we hope the committee will be thoroughly representative and not direct the work of the Society into one or two grooves merely. It is evident that a time must arrive when it is no longer desirable to exhibit and place on record examples of disease already fully described in the Transactions of the Society. And it is also evident that a Society with such a large number of working members as the Pathological has will do better work if it prosecutes its labours in given directions at certain times. Of course this arrangement will in no way restrict the exhibition of other specimens. The success of the new scheme will depend mainly upon the skill of the committee in the selection of subjects, which must not be too narrow. On Tuesday last the meeting was prolonged beyond the usual hour for the exhibition of some recent specimens. We cannot but think that it is a pity to do this unless in very exceptional circumstances; the recent specimens should be taken first, so that if numerous they might be exhibited and described at a subsequent meeting. The half hour tacked on is usually very wearisome; most of the members are tired and listless, while the wiser ones leave at the usual hour.

OLEOMARGARINE.

THE recently published correspondence with regard to the manufacture of the so-called oleomargarine, oleomargarine butter, butterine, or bosch butter, in the United States, has created no little disgust in England, and has been commented on by many of our daily contemporaries. The "delicacy" in question is well known to English chemists. Accurate methods for its detection and quantitative estimation are known, and there is no difficulty in obtaining convictions against tradesmen who sell it as genuine butter. Nevertheless, it is startling to read of the gigantic scale on which the manufacture has been carried on in America. One company alone, working under the patent of M. Mège of Nancy, converted in 1876-7 as much as 500,000 lb. of fat into the so-called butter every week. The State of New York now prohibits the sale of this article as butter, and this prohibition, coupled with the reduced price of the genuine article, has diminished the manufacture greatly. It is still, however, enormous, and there can be no doubt that much of this American sham produce finds its way, directly or indirectly, into this country. The newspaper extracts which are printed with the official report of Consul-General Archibald, exhibit an amusing conflict of statement and exchange of incivilities between the scientific men engaged in the controversy. On the one side oleomargarine is lauded as a most excellent and valuable article, equal in dietetic value to all, and superior to most, kinds of genuine butter. It is said to be made exclusively of the caul-fat of the ox, carefully purified and flavoured with milk. Its detection, except by chemical analysis, is asserted to be impossible. On the other hand, the defenders of the dairy allege that oleomargarine is a loathsome and

dangerous article, that it is made in part, at least, from the refuse fat of the pork packing establishments, and from "every variety of vile grease." They give startling microscopic drawings, and make even more alarming statements, as to the probability of the trichina being carried by its means. In fact, the two parties seem to vie with each other in the exaggeration of their statements. The chemical knowledge of the scientific combatants is evidently of the loosest kind, for several glaring absurdities occur in their analyses, and they do not seem in any single case to have determined either the specific gravities or the melting points of the samples they examined.

The truth in regard to the whole matter may be very simply stated. Oleomargarine, or whatever we may choose to call it, made from beef-fat is not a noxious or dangerous substance, and there is no reason why it should not be eaten if people, knowing what it is, choose to eat it. There is, however, an obvious risk that "vile grease" may be used by the manufacturer as a cheap substitute for caul-fat. The manufacture should, therefore, if carried on at all, be carried on under inspection. We are not inclined, however, to attach much importance to the trichina story. Certainly no English analyst would venture to certify that butterine was an adulteration dangerous to health.

On the other hand, the selling of animal fat as butter, or the mixing of it with butter without full and intelligible description, is clearly a fraud, and as such should be punished with rigour. When properly made and described, the sale of such articles should not, in our judgment, be prohibited. The price of good butter is becoming in many places so extravagant as to place this valuable article of food almost out of reach of the masses.

COMPOUND FRACTURES AT ST. GEORGE'S HOSPITAL.

WE have already alluded to the paper on compound fractures, in the last volume of the St. George's Hospital Reports, by Mr. Holmes, but the statistics he there gives appear worthy of more special notice. Mr. Holmes takes all the compound fractures of the leg in St. George's Hospital during a period of 14 years, in all 203 cases, of which 67 died, a mortality of 1 in 3. Of these 31 were submitted to immediate amputation, and 17 of the patients died. In 10 others death occurred within 2 days from other injuries or "shock." The remaining 162 cases, with a mortality of 40, or 24·7 per cent., may be conveniently divided into three groups, according to the treatment employed. In 33 strict antiseptic measures were used, and of these 7 died—21 per cent. The complications noted are—delirium 5 cases, fatal in 2; gangrene, 1 fatal case; tetanus, 1 case fatal; pyæmia, 2 cases, in 1 of which delirium made it "next to impossible to carry out the antiseptic treatment properly;" visceral disease proved fatal on the sixth day in 1 case. The only deaths out of the 7 which were surgically preventable are the 1 from gangrene and the 2 from pyæmia, only 1 of which may fairly be said to follow the use of antiseptics. The next series is a set of 60 cases treated by sealing the wound with dry lint, blood, or collodion, with a mortality of 14, or 23 per cent. Death occurred from pyæmia in 9 cases, from delirium in 5, and erysipelas or diffuse inflammation occurred 3 times. Particulars of the individual cases are not given, but there can be no reasonable doubt that among those treated by sealing of the wound there would be a large number in which the soft parts had been merely punctured by the bones, and not bruised or crushed by the fracturing force, while there is nothing to render it probable that there would be any such favourable selection of cases among those treated by Listerism. But in the absence of specific evidence this is only conjecture, and we would disregard it; the fact that out of 60 cases thus treated so many as 9 died of pyæmia is painfully eloquent, especially when compared with the single fatal case of blood-poisoning in the 32 cases treated antiseptically. The third set of cases, 69 in number, includes all those treated by other methods; the deaths were 19 in number, 27·5 per cent. Pyæmia was the cause of death in 10 cases, erysipelas or diffuse inflammation in 2, gangrene in 2, secondary hæmorrhage in 1, delirium in 3, and in 1 case the cause of death is not stated. But in addition, among the cases that recovered phagedæna occurred 4 times, erysipelas or diffuse inflammation 7 times, and delirium 4 times. It is noteworthy that the mortality from pyæmia is practically the same in these cases and those treated by sealing the wound; it is when strict Listerism is applied that a marked difference is seen. There is another point of view from which these facts are important. We often hear German statistics referred to as being no guide to the value of Listerism in England on account of the far greater prevalence of blood-poisoning on the Continent. But, surely, when in a London hospital so many as 13·5 per cent. of cases of compound fracture of the leg die of pyæmia, not to mention the results of local infection recorded in these statistics, we can hardly speak thus with justice, nor can we regard as unimportant the general adoption of a mode of treatment which reduces infection from a wound to a minimum, if, indeed, it do not prevent it entirely. Mr. Holmes confesses to a belief in the value of strict antiseptic measures, and we feel sure that his paper will induce or strengthen the same faith in those who will carefully and impartially weigh the facts cited therein.

METROPOLIS WATER-WORKS PURCHASE BILL.

UNDER this title the Home Secretary has brought in a comprehensive and apparently statesmanlike measure to buy the plant and business of the existing water-companies, with a view to "the supply of pure and wholesome water for drinking and other domestic purposes," &c. The mode of purchase is that which we have repeatedly recommended for adoption in the case of private asylums—namely, the creation of State bonds bearing interest, and the gradual extinction of the debt by a sinking fund. If these principles were generally applied to the purchase of property vested in shareholders, many difficulties would be avoided. The business of the companies is to be worked under the superintendence of a board, to be called the Water Trust. The measure, which may be more conveniently discussed after we have had an opportunity of examining its provisions in detail, is to take effect on the 1st day of July in the present year, and the enterprise is to be fully transferred to the Water Trust by the 1st of October next, so that the Government evidently "means business."

PLAGUE AND POLITICS.

THE Vienna correspondent of *The Times* appears to be under the impression that the Czar must have been influenced in the selection of General Count Loris Melikoff as chief of the Imperial Commission just created in Russia, by that nobleman's recent successful efforts in stamping out plague in the province of Astrakhan. It will be remembered that when the alarm of plague on the Volga spread, Count Loris Melikoff was despatched to the seat of the disease armed with powers as extraordinary for effecting its extinction within the limits of the provinces of Saratow and Astrakhan, as he is now armed with for repressing the political plague which is causing a panic throughout the Russian empire. The writer referred to thinks that his success in the former case suggests his fitness for dealing with, and promises a successful issue in, the latter case. Let us hope, however, that there are juster grounds for trusting in the success of Count Loris Melikoff's efforts in the political

crisis, than those derived from his attempts to arrest plague in the province of Astrakhan. There is too good reason for the belief that the measures organised at so much expense and trouble by the Count in Astrakhan exercised no appreciable influence upon the dissemination of plague, except in so far as they transformed the hygienic conditions of the places attacked. If he can succeed in transforming the unwholesome conditions of political or social life out of which the present political trouble arises, well and good; but if he aims at stopping the trouble by a moral quarantine, so to speak, the lesson from Astrakhan would not give much hope of good result.

ROYAL MEDICAL BENEVOLENT COLLEGE.

THE ensuing election at the College is to be made in accordance with the new rules—i.e., by the advice of a committee of six members elected by the council and the treasurer. This committee will examine the claims of each candidate for election, and will then submit a list of names to the council in accordance with the number of vacancies to be filled up.

The council will not forthwith appoint the candidates selected by this committee to the vacancies, but, with the ballot papers supplied to subscribers, they will enclose a slip with words printed upon it to the following effect:—"*The Committee of Examination recommend the following cases as being, in their opinion, the most urgent.*" A knowledge of the course to be pursued has, we believe, very much diminished the amount of canvassing, and we sincerely trust that the new plan will be found to work well, and that the objectionable touting and canvassing will be things of the past.

THE PARKES MUSEUM.

THE course of demonstrations lately given in this museum to members of the Working Men's Club and Institute Union is to be followed by a second course by Professor Corfield and Mr. Rogers Field, C.E., for the benefit of members of the Institution of Builders' Foremen and Clerks of Works. It is very gratifying to find that the museum is appreciated by the very class in which a practical knowledge of hygiene is so essential. The museum bids fair to occupy a prominent place among technical schools, and we are glad to find that the City companies are showing some disposition to help the committee in their work. The Clothworkers' Company have recently given a second donation of 50 guineas, and the Drapers' Company have contributed a similar amount. The Merchant Taylors' Company have also given 10 guineas. The committee are, therefore, just able to pay their way without trenching upon the small nest egg which they have wisely invested as the nucleus of an endowment fund. A very few thousand pounds would be sufficient to securely establish this useful museum for all time, and we have little doubt that a public body, or perhaps an individual, will be found who will erect a suitable building for the permanent housing of the collections and endow it with the moderate income which is necessary for its efficient maintenance.

MEDICAL EVIDENCE AT INQUESTS.

WHATEVER reforms may be effected in the office of coroner, we trust means will be taken to make it plain to this dignitary that medical evidence needs, and must, be called in every case of unexplained death. It is not for a coroner, be he a layman or a member of the medical profession, to allow evidence as to the cause of death to be taken or disregarded at pleasure. There should be no discretion in the matter. Even if he *thinks* he can recognise the cause of death, without evidence, there should still be proof offered to the Court. An ordinary judge does not convict a prisoner because he himself happens to possess a strong faculty of guessing whether the prisoners tried before him are guilty or innocent. Professional knowledge is required to qualify the coroner to understand and sift medical evidence, not to enable him to dispense with it. This should be clearly understood, or it will be necessary to take away from coroners, whether medical men or laymen, the discretion now entrusted to them, and which they sometimes abuse.

HUMAN FILARIÆ AND MOSQUITOS.

THE new investigations of Dr. Manson, communicated to the Quekett Club last week, appear to afford positive proof of a singular habit on the part of the filariæ. These microscopic worms periodically pass in and out of the circulation. Dr. Manson gives a table showing the hours of the day and night at which they are either present or absent in the blood. The worms are remarkably punctual in keeping to their appointed times. The evening inrush to the circulation commences about half-past seven, the overcrowding attaining its maximum at midnight. Into the clinical bearings of the subject it will be time to enter when the remarkable evidence brought forward by Dr. Manson has been fully published in the Transactions of the Club. In addition to some introductory remarks by himself, the President read brief communications on the subject of filariæ from Drs. Somerville, Mortimer-Granville, J. Bancroft, J. L. Paterson of Bahia, and others. The meeting was well attended, and in the course of the discussion which followed, Dr. Stephen Mackenzie stated that he had at present under his care, in the London Hospital, a patient from Calcutta, with chyluria. Although Dr. Lewis had found filariæ in the blood of this man in India, Dr. Mackenzie's efforts to find the filariæ had at present been unattended with success. The interest of the various papers was much increased by the exhibition of drawings and specimens of the filariæ in all the stages of growth hitherto observed. Numerous infested mosquitos were also shown.

INTERNATIONAL SANITARY CONFERENCE.

A JOINT resolution, authorising the President of the United States to call an International Sanitary Conference, to meet in Washington, was introduced into the Senate, and also into the House of Representatives, on Feb. 2nd. The resolution, which was referred to the Committees on Epidemic Diseases, set forth that the several powers having jurisdiction of ports likely to be infected with yellow fever shall be invited to send delegates, properly authorised, for the purpose of securing an international system of notification as to the actual sanitary condition of ports and places under the jurisdiction of such persons and of vessels sailing therefrom.

THE PROVIDENT DISPENSARY MOVEMENT.

IT is gratifying to notice the reports of the steady progress of this movement in various parts of the country. Three such reports are before us. The Kingston Provident Dispensary shows an increase of 516 members in 1879 as compared with 1878. The seven dispensaries connected with the Manchester and Salford Provident Dispensaries Association are rapidly becoming self-supporting. Two, in fact, are already so. The total cost to the guarantors has been reduced from £1235 in 1876 (the first year of the Society's operations), to £306, the amount paid in 1879. At the annual meeting it was resolved to unite the Association with the Manchester and Salford Provident Society. The Liverpool Dispensaries, not provident in the strict sense of the word, have resolved to give their honorary officers an honorarium of £40 per annum. It is to be hoped that the committee will see its way to applying the provident principle in a systematic form. Mere payments by

patients for medicines have not the same moral or economic effect, and the time has come when the free dispensaries can assist most materially in the provident movement by adopting the principle and applying it, where it can be applied without hardship, to the patients.

ALDERSHOT.—MESS FOR MEDICAL OFFICERS.

WE are glad to hear that Government has sanctioned the formation of a medical officers' mess at Aldershot, and we understand it is contemplated to open one without delay in the East Infantry Barracks, South Camp. This is a step in the right direction; Aldershot is not only our largest garrison, and has therefore always a large staff of medical officers, but under present arrangements the young medical probationers are sent there, after they leave Netley, for instruction in ambulance and stretcher drill at the depôt of the Army Hospital Corps, and for a course of riding drill; it is therefore most essential for their wellbeing and comfort that a mess should be provided. Netley already possesses a handsome and well-regulated mess, and we have a vivid recollection of the hospitality and sociability of the old medical staff mess at Fort Pitt in days gone by. We hope the example of Aldershot will be followed at all our large garrison towns.

DR. FAIRBANK.

THE chief facts of Dr. Fairbank's honoured life and sadly premature death are noticed elsewhere. It is happily seldom that we have to record a death so untimely, and in the very midst of active professional life. The supposition is that Dr. Fairbank suffered from aneurism of a cerebral artery, and there is some reason to connect this lesion with a fall from his horse which occurred five years ago. Dr. Fairbank filled an important position with credit to himself and with satisfaction to his Royal clients, who, we have reason to know, were unremitting in their kindly attentions during the few anxious hours that elapsed between the seizure and his death, as they have been in manifestations of sympathy since the fatal occurrence. The thousands who lined the way of the funeral on Wednesday were a proof that Dr. Fairbank enjoyed the respect of the community as well as of the Court. These facts, and the general sympathy of the profession, will afford some alleviation of the grief of Dr. Fairbank's family, and constitute a striking example of the position to which a young man may attain in this country, who begins life with no special advantages.

MEASLES FATALITY IN PLYMOUTH.

THE frequent and exceptional fatality of measles in Plymouth is noteworthy. Excepting Liverpool and Salford, not one of the twenty large towns, dealt with in the Registrar-General's Weekly Return, has shown nearly so high an average death-rate from this disease during the past ten years as has Plymouth. During the ten years 1870-79 the annual death-rate from measles in Plymouth has averaged 0·71 per 1000, and the disease was fatally epidemic in 1871, 1874, 1876, and 1878. The disease has again been exceptionally fatal within the borough during the past fourteen weeks, during which period no less than 104 deaths have been referred to this disease. The great and constant fatality of measles in Plymouth is probably in great measure due to the high death-rate from diseases of the respiratory organs in that borough. During last month the annual death-rate from diseases of the respiratory organs in Plymouth was equal to 9·3 per 1000 of the population, against but 6·5 in Portsmouth, 8·1 in London, and 5·1 (the average rate) in 151 urban sanitary districts. Plymouth enjoys a higher mean winter temperature than any other of the twenty large towns, which makes the high death-rate from diseases of the respiratory organs the more unaccountable. These facts are strongly suggestive of low and unsatisfactory condition, and call for the earnest consideration of the local sanitary authority.

THE AFGHAN CAMPAIGN.

A RETURN has just been presented to Parliament showing the numbers killed, died of disease, and invalided of the troops serving in the late Afghan campaign from the date of their advance into the Khyber Pass till their return across the Indus at the close of the operations in the field. From this it appears that of the European force 1 officer and 11 men were killed in action or died of their wounds, 12 officers and 349 men died of disease, including, however, 1 officer and 46 men accidentally drowned in crossing the Cabul river, and 19 officers and 925 men were invalided. Of the native troops 3 European officers, 1 native officer, and 49 men were killed, 7 European and 14 native officers and 794 men died of disease, and 14 European and 17 native officers and 960 men were invalided. Unfortunately the returns give no information respecting the strength of the two forces, or of the various corps composing each, and we are thus unable to institute any comparison of their respective losses. We may observe, however, that nearly half of the invaliding among the European troops occurred from two corps, the 81st Regt. and the 4th Batt. Rifle Brigade. The highest invaliding in the native force was from the 27th Infantry, and next to it from the Sappers and Miners. But without a statement of the strength of the various corps it would be useless to attempt any comparison.

THE LIVERPOOL WATER BILL.

THE Liverpool Water Bill has been read a second time in the House of Commons and referred to a so-called hybrid Committee. We refer to the subject here on account of a suggestion made by Mr. Raikes in the course of the discussion on the Bill, and which seems to us new under such circumstances. He observed that it was desirable the Committee should be assisted by evidence from the Local Government Board, adding that such evidence was more valuable than professional evidence on either side, which was always open to the suspicion that it was supplied to order. Having regard to the very important public questions at issue in this case, we trust Mr. Raikes' suggestion will be acted upon.

"DEATHS FROM VACCINATION."

A QUESTION was put by Mr. Gourley in the House of Commons on Monday evening (March 1st) in reference to deaths from vaccination, which is, perhaps, the most curious incident which has happened even in anti-vaccination vagaries. He asked the President of the Local Government Board if his attention had been called to the returns of the vaccination officer for the Durham Board of Guardians for the year 1878, in which it was stated that out of 2381 children born in the Western and St. Nicholas district, 305 had died from the effects of vaccination, while during the first six months of last year the number of deaths in the same union was 141 from the same cause. The deaths referred to, it appears, were those of children who died *before* vaccination!

ACROBATIC PERFORMANCES.

THE Bill to be introduced by Mr. Jenkins for the prevention of dangerous acrobatic performances will, if it pass, add a very necessary statute to the code of laws framed to save the squandering of human life. In this Bill dangerous performances are first of all defined, and by the principal clause it is sought to enact that any lessee or occupier permitting a dangerous performance shall be liable to a fine of

fifty pounds. Any proprietor who should compass a child's death by encouraging it to perform a dangerous feat would be liable by the existing law to be convicted of manslaughter, and certainly he would be so liable were any spectator killed by the fall of an acrobat or his machinery. Nevertheless, a new Act is urgently required. If the managers of music halls cannot make their business thrive without catering for the sensational and prurient tastes of the public it is desirable, on public grounds, that this class of enterprise should fail.

THE UNIVERSITY OF GLASGOW.

PROFESSOR J. B. COWAN, M.D., has, as we announced last week, petitioned the University Court to report to Her Majesty in Council in favour of his application to be allowed to retire from the chair of Materia Medica in consequence of the state of his health. It is creditable to Dr. Cowan to resign, though in middle life, when feeling unequal to the duties of his important chair, but his resignation will be not the less regretted. Dr. Cowan has been very much respected as a most just and impartial representative of the Senate in the University Court. It is satisfactory to notice that several eligible candidates are presenting themselves for the vacant chair. Amongst them are Dr. Matthew Charteris, Dr. John Dougall, Dr. James Finlayson, and Dr. Gavin P. Tennent.

THE HEALTH OF CALCUTTA.

SURGEON-MAJOR DR. MCLEOD, the health officer for Calcutta, reports favourably on the state of health of the city during the last quarter of 1879. The aggregate mortality of the quarter was lower than that of the corresponding quarter of any year in the preceding decade, with the exception of 1869, 1870, and 1873. This lowering of mortality is observed in all of the deaths the causes of which are given in the tables accompanying the report—namely, "fevers," cholera, dysentery, diarrhœa, and small-pox. The mortality from cholera fell below the number recorded in any of the preceding ten years, except 1870 and 1873, and amounted to less than one-third of the average. With regard to this diminution Dr. McLeod observes, it "is all the more satisfactory considering that the period is composed of the reduced returns coincident with the introduction of a pure water-supply." The reduction of the mortality from "fevers" was observed equally in the suburbs as in the town, and was coincident with a scanty rainfall and cheaper food.

DEATH OF A MEDICAL OFFICER AT KANDAHAR.

TELEGRAPHIC information has been received of the death at Kandahar, on the 29th ultimo, of Surgeon-Major Robert Henry Bolton, Army Medical Department. Mr. Bolton entered the service in September, 1863, and was promoted to the rank of Surgeon-Major in April, 1876. He took part in the Ashantee campaign, accompanying the left wing of the 2nd Battalion 23rd Fusiliers to Coomassie, for which he received the Ashantee war medal and clasp. During the Afghan war he has been in medical charge of a battery of Royal Artillery of General Sir Donald Stewart's Division, and was under orders to return to India when he succumbed to disease due to the arduous services of the campaign.

AT a meeting of the Society of Medical Officers of Health, held on Feb. 20th, the following resolution was passed, a copy of which has been forwarded to Lord Beaconsfield and to Dr. Farr:—"The Society of Medical Officers of Health desires to record its high appreciation of the scientific qualifications of Dr. Farr, and of his long and valuable services in the department of the Registrar-General, and is of opinio that his able deductions and statistical work have contributed in an eminent degree to the advancement of sanitary science, and entitle him to some special mark of honour and approval. The Society also desires to express its gratitude to Dr. Farr for his invariable courtesy towards all medical officers of health."

THE forthcoming annual banquet on behalf of the funds of University College Hospital, to take place on March 11th, at Willis's Rooms, and at which H.R.H. Prince Leopold will take the chair, will, there is reason to believe, be a very brilliant gathering. The French ambassador, the Lord Mayor, and several well-known members of the aristocracy have expressed their intention of being present; and we trust the result will prove financially satisfactory, as the recent enlargement of the hospital has necessarily very much increased the annual expenses.

A CORONER'S JURY in Manchester having returned a verdict of "Death from natural causes, aggravated by neglect of medical aid," in the case of a woman who had been an inmate of the Royal Infirmary, the House Committee met to consider the matter, and have formally denied the charge of neglect. They explain that the disease under which the patient laboured "being a chronic one, the medical officer no longer considered hers a suitable case to remain in the hospital, and she was therefore made an out-patient."

THE death of Edward Owen Jones, M.B., C.M., of Carmarthen, under peculiarly melancholy circumstances, has been announced. Mr. Jones was sailing in a friend's yacht, which came to anchor off Tenby pier on the night of the 25th ult. His absence from the vessel was discovered by the sailor in charge, who at three o'clock on the following morning went on deck to make preparations for sailing. With the daylight several boats went out and dragged for the body, which was recovered a few hours afterwards, and conveyed to the Cottage Hospital, to await an inquest.

IN the way of remuneration for watching over the health-interests of their fellow-townsmen, the members of the Local Board of Exmouth deem £40 per annum as too much by half. They have, therefore, resolved to reduce the salary of their health officer to £20 a year. As might well be expected, the Local Government Board have declined to sanction this little economical (?) arrangement. But the Local Board of Exmouth "stand by their guns"!

IT is proposed to build a new lunatic asylum for Exeter, and a site has, it is stated, been procured on favourable terms. There are, it seems, some hundred insane persons belonging to the city scattered over the county, the cost of whose maintenance ranges from £3000 to £4000.

THE Belgian Royal Society of Public Medicine is, we understand, organising, in connexion with this year's independence *fêtes*, a General Congress of Public Hygiene and Medicine, to be held in Brussels at the Palace of the Academies, next August.

DURING the severe weather of the fortnight ending Feb. 14th, forty persons were reported to have died in Marylebone Workhouse, twenty-six of them being "old and infirm," and nine of these being over eighty years of age.

AURAL surgeons, and others interested in the pathology and therapeutics of the ear, will be glad to learn that the next Oto-iatric Congress will be held at Milan in September next, after the International Public Health Congress at Turin.

WE learn that a committee, under the presidency of Admiral Hoskens, will shortly assemble to consider the means best calculated to remedy the grievances of which the medical officers of the navy so justly complain.

TESTIMONIAL TO DR. FARR.

A UNANIMOUS feeling prevails among Dr. Farr's friends and admirers that his retirement, after a distinguished public service of forty-two years during which he has laboured unremittingly for the promotion of public health and statistical science, affords a fitting opportunity for presenting him with some substantial mark of their appreciation of the value of his labours. In order successfully to carry out this project, the initiation of which has already met with unanimous and hearty approval, a representative committee is now in the course of formation. Comparatively few have at present been applied to, and among those from whom answers have as yet been received, the promise of cordial support has been invariable. We are requested to state that it is the distinct wish of the promoters of this testimonial—and all those who know Dr. Farr will readily understand that this course will be thoroughly in accordance with his wishes—that the presentation should only be a personal tribute to his past statistical and sanitary labours, without reference to the controversial aspects of his retirement, which could not fail to be painful to him, and which he would wish to be forgotten.

As each post is bringing fresh promises of support, the names below are to be considered merely as a preliminary list of the committee, to which other names will be added so soon as the consent of those applied to is received. We shall be glad to receive any promises of support or assistance in promoting the object in view, which appears to appeal to all who appreciate the value of Dr. Farr's services in promoting sanitary and statistical science. Communications on the subject may be addressed to Mr. Noel A. Humphreys, of the Registrar-General's Office, Somerset House, who is temporarily acting as Honorary Secretary.

Preliminary List of Committee.

The Earl of Derby.
The Earl of Shaftesbury, K.G.
Earl Fortescue.
Sir John Lubbock, Bart, M.P., F.R.S.
Sir Brydges Henniker, Bart., Registrar-General.
Sir Thomas Watson, Bart., M.D., F.R.S.
Sir William Jenner, Bart., K.C.B., M.D.
Sir James Paget, Bart., F.R.S.
Sir William Gull, Bart., M.D., F.R.S.
Sir George Burrows, Bart., M.D., F.R.S.
Sir Joseph Fayrer, K.C.S.I., F.R.S., President of the Epidemiological Society.
Mr. William Newmarch, F.R.S., 67, Lombard-street, E.C.
Major Graham, late Registrar-General.
Dr. Acland, F.R.S., President of the General Medical Council.
Dr. Risdon Bennett, President of the College of Physicians.
Mr. Luther Holden, President of the College of Surgeons.
Mr. Erichsen, F.R.S., President of the Medical and Chirurgical Society.
Mr. A. H. Bailey, President of the Institute of Actuaries.
Dr. Alfred Carpenter, President of the British Medical Association.
Mr. G. W. Hastings, President of the Council of the Social Science Association.
Dr. James Wakley, Acacia-park, Long Cross, Chertsey.
Mr. John Simon, C.B., F.R.S., late Medical Officer of the Privy Council.
Mr. Robert Rawlinson, C.B., Chief Sanitary Inspector of the Local Government Board.
Mr. Ernest Hart, Chairman of the Parliamentary Bills Committee of the British Medical Association.
Mr. Thomas Wakley, Redcliffe-gardens, South Kensington.
Mr. Richard B. Martin, 68, Lombard-street, E.C. (Hon. Treasurer).

HEALTH OF LARGE ENGLISH TOWNS.

EIGHTH WEEK OF 1880.

THE rate of mortality in our large towns has again fallen to its normal proportions. In twenty of the largest English towns, estimated to contain in the middle of this year seven and a half millions of persons, or nearly one-third of the entire population of England and Wales, 5412 births and 3322 deaths were registered last week. The births exceeded by 227, and the deaths by 47, the average weekly numbers during 1879. The deaths, however, showed a further decline of 418 from the excessive numbers returned in the three preceding weeks. The annual death-rate in the twenty towns, which had been equal to 37·0, 30·1, and 26·0 in the three previous weeks, further declined to 23·1 last week. During the past eight weeks the death-rate in these towns has averaged 27·5 per 1000, against 26·0 and 27·0 in the corresponding periods of 1878 and 1879. The lowest death-rates in the twenty towns last week were 14·4 in Wolverhampton, 16·9 in Bradford, 17·0 in Leeds, 18·5 in Leicester, and 19·0 in Brighton. The rates in the other towns ranged upwards to 26·7 in Oldham, 27·0 in Liverpool, 31·8 in Nottingham, and again the highest rate was 32·0, in Plymouth.

The deaths referred to the seven principal zymotic diseases in the twenty towns, which had been 637, 589, and 557 in the three preceding weeks, further declined last week to 467; they included 186 from whooping-cough, 118 from scarlet fever, 80 from measles, and only 26 from fever. The annual death-rate from these seven diseases averaged 3·2 per 1000 in the twenty towns, and ranged from 1·1 both in Birmingham and Leeds, to 7·6 and 9·7, respectively, in Nottingham and Plymouth. Whooping-cough showed the largest proportional fatality in Plymouth and Newcastle-upon-Tyne; measles in Plymouth, Nottingham, and Hull; and scarlet fever in Sunderland, Nottingham, Brighton, and Norwich. The deaths from enteric fever in Sheffield, which had been ten and eleven in the two preceding weeks, declined to two last week. Small-pox caused 13 more deaths in London, but not one in any of the nineteen large provincial towns. The number of small-pox patients in the Metropolitan Asylum Hospitals, which had been 91, 126, and 139 at the end of the three preceding weeks, further rose to 163 on Saturday last; 48 new cases of the disease were admitted to these hospitals during the week, against 57 and 58 in the two previous weeks. The Highgate Small-pox Hospital contained 12 patients on Saturday last, ten of whom were suffering from small-pox.

The fatality of lung diseases, which had showed so large an excess in recent weeks, fell below the average last week. The deaths referred to diseases of the respiratory organs in London, which had been 1557, 1020, and 693 in the three preceding weeks, further declined to 459 last week, and were 12 below the corrected average number in the corresponding week of the last ten years; 306 resulted from bronchitis, and 104 from pneumonia.

THE MANCHESTER MEDICO-ETHICAL ASSOCIATION AND THE CHILDREN'S HOSPITAL, PENDLEBURY.

AT a special general meeting of the above Association, held on February 25th, 1880, the question of Dr. Humphreys and the Children's Hospital was introduced by Dr. Henry Simpson, the President, who moved the following resolution:—"That this Association having had its attention called to the action of the authorities of the Children's Hospital, Pendlebury, in suspending Dr. Humphreys, the senior physician, and having considered the published statements in vindication of this action, hereby records its deep sense of the cruelty and injustice of the treatment which Dr. Humphreys has received, and assures him of its sincere sympathy." In supporting the resolution, the President made the following remarks:—"We are met this evening to consider a matter which seems to come very appropriately before the Manchester Medico-Ethical Society. Its special object, or at all events one of the most important of them, is

to discuss the relations between the medical profession and the public; and no recent occurrence has excited more painful interest among us than that which has taken place at Pendlebury. It is important in its bearings on the relation between the lay and medical elements in a hospital, and on those between the nursing department and the medical staff. The latter is especially interesting just now, if we bear in mind the evidences of a foolish attempt in some quarters to put the nurses above the doctors. This case also opens up the question as to whether or not it is advisable to invest any one man with what amounts practically to a dictatorship. In moving the resolution, which it is my duty as President to bring before you, I will leave those questions aside, and confine myself as closely as possible to its special subject matter." Dr. Simpson then criticised the line of defence of the medical superintendent and the lay committee, and referring to the language of one of the governors said: "Not even the hysterical fear of 'anarchy' displayed by Mr. Steinthal justified such a proceeding. Dr. Humphreys is not one of the 'dangerous classes.' He is not an anarchist, or Communist, nor, as far as I know, even a Republican. No, gentlemen, Dr. Humphreys is one who has attained to high university distinction, being fifth wrangler and a former fellow of his college. He is a man of scholarly and scientific tastes, and has shown marked ability in the pursuit of medicine as a science. The history of the Children's Hospital is distinguished by this peculiar feature, that during its long period of existence it has added next to nothing to medical science and literature. I must except some valuable papers contributed by Dr. Barlow, but otherwise I am not aware of any scientific work emanating from that hospital. Dr. Humphreys, however, was alive to the value of the wide field of observation before him, and by his frequent appearances at the Manchester Medical Society, and at the meetings of the Microscopical Section of that Society, with communications displaying earnest thought and careful observation, he gave a foretaste of what might have been looked for in the increase of our knowledge of disease and its treatment, had not his connexion with the hospital been ruthlessly cut short. There are," he continued, "one or two questions still to be named before I move the adoption of the resolution. The letter of Mr. Oliver Heywood to Dr. Thorburn, which appeared in Monday's papers, conclusively settles one point which was justly rousing a strong feeling of indignation in our profession. The trumpery and ridiculous charge against Dr. Humphreys, which was the sole reason given for his suspension, together with the feeble defence of it in the medical and local papers by Mr. Cross, Mr. Steinthal, and Dr. Borchardt, have led to a wide-spread belief that there must have been some grave delinquency which the Board, out of kindness, have not published. Mr. Heywood's letter disposes of this idea, for he emphatically says there was nothing."

The following gentlemen—viz., Mr. Meacham, Dr. J. S. Fletcher, Dr. Royle, Dr. Brierley, Mr. Dacre Fox, Dr. Stone, Mr. T. N. Dean, Dr. Leech, Dr. Bury, and Mr. Cullingworth, took part in the discussion, and expressed their concurrence in the views enunciated by the president. The resolution was then put to the vote, and carried without a dissentient voice.

THE RELATIONS OF MEDICAL MEN TO THE CORONER'S COURT.

THE following resolutions were proposed and carried at recent meetings of medical men to consider their relations with the Coroner's Court. A report (for which we regret we cannot find room) of the proposals and subjects discussed at those meetings has been drawn up by Dr. Thomas, the Deputy Coroner for Central Middlesex, and Dr. Steavenson, and has been submitted to Dr. Hardwicke, the chairman of the meetings, and received his sanction:—

1. "That the coroner be requested to accept the services and receive the evidence of a skilful medical gentleman in such cases where the medical man called in at death does not desire to make the post-mortem examination, the fee for which (one guinea) should be paid by the medical man desiring such services."

2. "That it is desirable to refer the friends of a deceased person to the registrar in cases where the medical man called in cannot satisfactorily certify as to the cause of a death, but that the said medical man communicate the ascertained facts direct to the Coroner's office on a form to be supplied for that purpose, so that the coroner can form his judgment as to the necessity of holding an inquiry. The communication being of a private character."

3. "That no registrar of deaths shall be entitled to give an order for the burial of a body without first receiving from a duly registered medical practitioner a certificate of the death as from natural causes; or a certificate from the coroner of the district after an inquest."

Correspondence.

"Audi alteram partem."

"THE CORONER'S FUNCTION."

To the Editor of THE LANCET.

SIR,—The proposal contained in your leader of the 21st instant with reference to the possible future relation of Medical Officers of Health with the Coroner's Court, harmonises so completely with a recent similar suggestion of my own, that I am induced to ask for a short space in your valuable journal with a view of further ventilating this increasingly important question.

You are correct in stating that an extension of the duties of public health officers might be effected with much public advantage, and without interference either with their present functions or with the mode of their appointment. It is, however, certain that a considerable alteration must be made in the requirements of the law relating to special qualification for such appointments, if health officers under the proposed *régime* are to possess the confidence either of the public or of the medical profession. However desirable it may be, theoretically, that preventive and curative medicine should be considered as one science, it is found by experience that the practice of the physician's art and that of State medicine are mutually incompatible. Inasmuch then as it is certain that the official sanitarian who desires to excel in his special calling must give up all hope of success in the ordinary walks of professional life, it becomes a matter of simple justice to him, not less than of public policy, that some means should be within his reach of procuring some authoritative public testimony as to his special qualifications and attainments, analogous to that which his brethren in ordinary practice secure by the acquisition of a medical degree or diploma. In other words, power should be given to one or other of our Universities to examine for and grant degrees in State Medicine, which, like ordinary medical degrees, might confer the titles respectively of Bachelor and Doctor of State Medicine.

The regulations for the first of these degrees might be similar to those now in force for the certificate in Sanitary Science of the University of Cambridge, and might provide for the admission to examination of all registered practitioners over a certain age. The range, however, of the examination should be further extended, so as to embrace the whole of what is included in the term "State Medicine;" and the report of the examiners, instead of discriminating between passed and plucked merely, might usefully class the successful candidates into two or more divisions according to merit, their relative position in the class-lists being duly notified on the degree certificate.

The regulations for the higher degree should be stringent, and should exclude from admission to examination all candidates who have not had actual experience in sanitation and in the practice of public health for a considerable period. The examination for this degree should be an extended and thorough one, and should be conducted by men of the highest attainments in these branches of science respectively. The approval by the examiners of any candidate should moreover be made conditional on his evincing throughout his examination a scientific and practical acquaintance with his subjects, similar in point of accuracy to that which, *mutatis mutandis*, is exacted from candidates for the Doctorate in Literature or in Science of the London University.

I do not know what difficulties beset the way of the existing universities with regard to the inauguration of new

degrees, but it would surely not be difficult to insert a clause in the Charter now in course of preparation for the Royal Irish University, empowering that institution to grant degrees in State Medicine. However this may be, it is certain that were such an examination instituted by a respectable university, there are a large number of highly-qualified men who would be glad to procure such a "hall-mark" for their attainments as is implied in the granting of a good university degree; and it is only reasonable to assume that the fact that a number of men had thus given such high guarantees of special proficiency in State Medicine would act as a powerful incentive with Parliament to authorise such a desirable and, I may add, economical extension of the duties of health officers, as your able leader foreshadows and suggests.

I am, Sir, yours &c.,

Salford, Feb. 23rd, 1880. JOHN TATHAM.

BRITISH MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—In last week's LANCET you announce the promotions to the rank of brigade-surgeon, and in doing so say, "We are gratified to record the liberal manner in which the Secretary of State for War has acted." I feel sure, therefore, that you will be pleased to hear that the Secretary of State for India in Council has decided that the medical officers who joined under the terms contained in the Royal Warrant of April, 1876, are to be paid at the rate of £250 a year, instead of the rate of £182 10*s.* a year, the amount received during the past two years by those officers serving in India, and authority to issue the difference has been forwarded to India. This recognition of the just claims preferred by these medical officers who were sent to India on the old rate of pay will go a long way to promote a healthy feeling of faith in the promises of the War Office, and to make men prize the commission they should consider it an honour to hold. Young medical men may now come forward without any fear that the promises held out to them will not be fulfilled, and that breach of faith (the result, I am inclined to think, of imperfect understanding) of which we have heard so much is a tale of the past, only to be forgotten in the one great effort now being made to consolidate the Department and secure for our soldiers in every clime the skilled medical attendance to which they are so justly entitled, and which it is the desire of a grateful country to procure for them.

I have great pleasure in forwarding this information to you for publication, and subscribe myself,

Yours obediently,

March 3rd, 1880. "420."

THE NAVAL MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—As one interested in Naval Medical Reform, would you permit me to offer a few observations from a surgeon's point of view? You will do us a bad turn, indeed, if you succeed in having a period of twelve years' "service," or "in the service" fixed, for our promotion to Staff Surgeon. In the last batch of promotions Surgeons under eleven years were included, who had no special claim, and from this time forward the flow of promotion would seem to promise even to improve still more. The Senior Surgeons now eligible are about ten years in the service, and vacancies already exist for promotion. Should any period be fixed, we hope it will be ten years, of which five shall have been served abroad, it being manifestly unfair for some to be allowed to serve almost continuously at home. From what I have learned from time to time in conversation with many of my brother officers, I do not think that the examination for promotion should be abolished; it is no grievance or terror to the man who keeps himself apace with the times, and reads his LANCET regularly, but there should be no further penalty after loss of promotion in due turn—no forfeit of time or increased pay. I would advocate 12*s.* a day on entry; 14*s.* after four years' service; 16*s.* after eight years; promotion to Staff Surgeon at ten years on 18*s.* a day, with an annual increase of 1*s.* a day until the maximum of 24*s.* be reached; promotion to Fleet Surgeon at eighteen years' service, with a proportionate increase of pay in this and the higher ranks, to those already indicated for Surgeons and Staff Surgeons, £1 per diem retirement on completing twenty years' service.

I am, Sir, yours faithfully,

February 27th, 1880. SURGEON R.N.

*** Our correspondent must not forget that the present state of the list is very abnormal, and that promotion can scarcely continue for long at ages so low as at present. We think that a junior grade being an unquestioned necessity, it is right to fix it at the same age for both services, particularly as foreign service in a junior rank is sometimes a naval grievance, as reported to us, and, moreover, as compulsory loss of time on half-pay is not suffered while in the junior grade. By our proposal an annual mean for the first eighteen years of £308 5*s.*, and by our correspondent's of £311 5*s.*, is asked for; that by the new Army Warrant being a fixture at £284 14*s.*; with which the percentage differences are respectively 8·11 for ours and 9·11 for his. We would sacrifice the 1 per cent. for sake of uniformity with the army scale in its periods of increase. Be that as it may—for we profess to have proposed only the lowest acceptable scales—we find that promotion at ten years, with "Surgeon R.N.'s" scale of pay up to eighteen years, would benefit only to that extent 1 per cent. above our plan, with sure promotion at twelve years, and pay, on our proposal; and therefore we do not ask for the earlier promotion, except for "meritorious services."—ED. L.

DRUGGISTS' CHARGES.

To the Editor of THE LANCET.

SIR,—I was rejoiced, in common with many of my professional brethren, to read your remarks in a leading article of the 28th inst., on Druggists' Charges. The remedy you suggest, that the dispensing of medicines should be given up by the profession into the hands of the druggists, is a most efficient one, and I beg to bear my testimony to the fact that it is quite practicable in all towns of any size, if the medical profession will act in concert. The medical men of this town agreed some time ago to give up the supplying of medicines to their patients, and to write prescriptions only. But in order to protect the public from unreasonable charges, they first communicated with the chemists, requesting them to furnish a tariff of charges (of which I enclose a copy) at which they would consent to supply medicines. I may mention that the system has been in operation now for over twelve months, and appears to work quite satisfactorily. Any further comment on the desirability of this course being followed by the profession generally would be superfluous, as you have quite sufficiently shown its advantages in your article above mentioned.

I am, Sir, your obedient servant,

GEO. M. PITTOCK,

Margate, Feb. 28th, 1880. Hon. Sec., Margate Medical Club.

Obituary.

EDWARD COPEMAN, M.D.

DR. COPEMAN was the son of a merchant living at Great Witchingham in Norfolk, and was educated at the Grammar School at Trunch. After leaving school he was apprenticed in Norwich, first to Mr. A. Brown, and then to the celebrated J. G. Crosse. Having studied with these gentlemen, and served as a dresser at the Norfolk and Norwich Hospital, he came up to London, and entered at St. George's Hospital. Soon after obtaining his qualifications to practise he returned to Norwich, and was elected house-surgeon to the hospital. He first practised in Coltishall, near Norwich, and obtained there a considerable reputation. Having graduated as M.D. Aberd. in 1847, he removed to Norwich the next year and started in practice as a consulting physician, and in 1851 was elected physician to the hospital, with which institution he was connected until the time of his death.

He was officially connected with several other medical charities in the city. He was a Fellow of both the College of Surgeons and the College of Physicians. He was an active member of the British Medical Association, and when the Association visited Norwich in 1874 he was elected its President. Although seventy-one years of age, he continued busily engaged in practice up to the very day before his death, which occurred suddenly at the Close, Norwich, on Feb. 25th.

Dr. Copeman was very successful in practice, for, in addition to being a skilful physician, he was ever fortunate in winning the respect and esteem of his patients. He has written on several medical subjects, such as apoplexy, diphtheria, and intestinal obstruction, but he was chiefly interested in gynæcology, and has made several valuable contributions in this department of science. He edited "Crosse's Cases in Midwifery," and published some "Records of Obstetric Consultative Practice," "Illustrations of Puerperal Fever," "On Flooding after Delivery." Lately he has been urging the great value of dilatation of the cervix uteri for the cure of the vomiting of pregnancy, and has published several cases—one only last week—where this line of treatment has been followed by marked success. Others, encouraged by him, have had equally good results, and probably it will be for his advocacy of this treatment that he will be most widely known.

Dr. Copeman was an accomplished musician, and we believe he regularly played the violoncello in the orchestra at the Norwich Festivals. He was for many years the chairman of the sub-committee of management of these festivals, and on retiring from the office a few years ago was presented with a handsome gift of plate. He was a warm friend, a most upright man, and held in high esteem by all classes, one evidence of which is the fact that he was a magistrate of the city. At the meeting of the weekly board of the Norfolk and Norwich Hospital, on Saturday last, a resolution expressing the high esteem in which he was held, their sense of the value of his services to the institution and city generally, and of condolence with his bereaved family, was unanimously adopted.

THOMAS FAIRBANK, M.D., M.R.C.S.

WE feel very deep regret in announcing the death of Dr. Fairbank, of Windsor, at the early age of thirty-six. This untimely close of a most promising career will awaken in the profession a keen feeling of sorrow and of deep sympathy with his bereaved family.

Dr. Fairbank was born in the year 1843, and received his education at the Forest School, under Dr. Guy, in the course of which, we are assured, he evinced an aptitude for classical and other literary studies which gave promise of the highest success, if, as was at one time contemplated, he had proceeded to the University of Oxford. But Dr. Fairbank's preference for the medical profession induced his friends to give him an early opportunity of pursuing the career which he had chosen. He entered St. Bartholomew's Hospital at the age of seventeen, where his quiet geniality and humour, as well as his studious habits and retentive memory, were long remembered. Old fellow-students will recall how frequently, in the exposition of any difficult case, the lecturer or physician would turn to him as the student most likely to recall a precedent. At the University of London Dr. Fairbank passed brilliantly on the examination for the second M.B., receiving gold medals in medicine and in forensic medicine, and otherwise acquitting himself so as to obtain first-class honours in all the subjects. He became for a short time house-surgeon to the Metropolitan Free Hospital, in Devonshire-square; and when Mr. Brown, the Queen's surgeon at Windsor, retired from practice, Dr. Fairbank was recommended for the appointment by the late Sir James Clark, and Sir James (then Mr.) Paget. Thus, at the early age of twenty-three, he succeeded to one of the best and most responsible private practices in England, besides becoming surgeon to the Queen, the Royal family, and the Royal household at Windsor Castle, as well as to the Prince and Princess Christian and household at Frogmore. During fourteen years he lived respected and honoured by all who knew him; and we believe that we are not transgressing the bounds of good taste in saying that throughout that period Dr. Fairbank was regarded by the Prince and Princess Christian as not only an invaluable medical adviser, but also as a tried and esteemed friend, whose loss they deeply deplore.

His sudden death on the 26th ult., from aneurism of an artery in the brain, aroused the deepest sympathy not only in Windsor, but throughout the whole medical profession. Dr. Fairbank leaves a widow and five young children. He was buried in the churchyard at Clewer on Tuesday, March 2nd. The burial service was performed by the Dean of Windsor, and the funeral was attended by representatives of the Queen and of the Prince and Princess Christian, by the Mayor and Corporation of Windsor, and by the Committee of the Royal Albert Institute in that town, of which he was chairman.

DAVID FIDDES, M.D.

DR. FIDDES, whose death, in his sixty-eighth year, took place on the 25th ult., after an illness of only four days, was a native of Aberdeen, where he was educated. In 1832 he obtained the diploma of Member of the English College of Surgeons, and eleven years later took the degree of M.D. at Marischal College. Appointed surgeon on board an East Indiaman, he made several voyages to the East in that capacity. Dr. Fiddes afterwards settled in his native town, and gradually acquired one of the best practices in Aberdeen. For many years he held the post of surgeon to the Royal Infirmary, and at the time of his death was consulting surgeon to that institution. He was also connected officially with several other medical charities of the town. Of a kindly sympathetic nature, Dr. Fiddes leaves behind him pleasant memories, and his loss will be widely felt.

Medical News.

APOTHECARIES' HALL.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on Feb. 26th:—

Astley, John Dugdale, Cambridge-gardens, Notting-hill.
Berridge, William Alfred, Redhill, Surrey.
Collier, William, Stapleford, Cambs.
English, Edgar, Whitby.
Lloyd, John Jenkin, Llanelly.

The following gentlemen on the same day passed the Primary Professional Examination:—

William Parker Dester, Royal Infirmary, Bristol; Edward Coells Johnston, Queen's Hospital, Birmingham; William Alsope Shillito, General Infirmary, Sheffield.

INDIAN MEDICAL SERVICE.—The last name in the first column of names of gentlemen who passed the examination for the above service was misprinted in our last issue. It should have been "Pank, P. D.," not "Park."

STAFF-SURGEON S. LEXTON has been appointed to the *Pembroke*.

MR. ROBERT WILLIAMS, of Kingaland, has received the Government grant for vaccination (£8 14s.)

DR. J. CRICHTON-BROWNE and Dr. WM. MANSELL MACCULLOCH have been elected members of the Royal Institution of Great Britain.

DR. ARCHIBALD HAMILTON has been placed on the Commission of the Peace for Westmoreland, and Dr. Arthur Edward Turnour for Denbighshire.

THE Local Government Board have sanctioned the borrowing of £83,000 by the Town Council of Colchester for the purchase of the waterworks of the town.

THE Duke and Duchess of Connaught, accompanied by Count Münster and Countess Marie Münster, visited the German Hospital, Dalston, on the 25th ult. Their Royal Highnesses minutely inspected the whole of the establishment, and expressed themselves highly satisfied with all the arrangements.

SEWERAGE OF LOUGHREA.—The guardians of this union, at a meeting recently held, resolved to carry out the necessary works for the proper sewerage of the town. The desirability of executing such a sanitary improvement was brought under the notice of the guardians by the Town Commissioners, and it is satisfactory to find that no time will be lost in carrying out the proposed scheme.

THE SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—The annual festival in aid of the funds of this hospital was held on the 24th ult., the Duke of Connaught presiding. Since the foundation of the hospital 236,362 women and children have been treated in the out-patient department, and 5877 women have been admitted as in-patients. £5000 per annum is required to maintain the hospital and its branch, Dorset-street, Manchester-square, of which sum the annual subscriptions amount to about £1200, the remainder having to be raised by donations. His Royal Highness, in proposing the toast of the evening, commented upon the excellent work the institution had done, and made an earnest appeal for assistance. The secretary announced subscriptions amounting to £1682.

BEQUESTS ETC. TO MEDICAL CHARITIES.—The late Miss Jane Steele, of Clifton, has bequeathed the following legacies, all duty free:—The Bristol Royal Infirmary, £1000; the Bristol General Hospital, £1000; the Bristol Blind Asylum, £1000; Müller's Orphan Asylum on Ashley Down, £1000; the Bristol Deaf and Dumb Institution, £1000; the Bristol Dispensary, £200; the Eye Dispensary in Orchard-street. £200. The Royal Berkshire Hospital, Reading, has become entitled to £2000 under the will of Miss Susanna Caroline Palmer, of Holme Park, Sonning. Mr. Edward Ward, of Claremont-square, bequeathed £200 to the British Lying-in Hospital, and £50 to the Finsbury Dispensary. The Warneford, Leamington, and South Warwickshire Hospital has become entitled to £300 under the will of Mr. Frederick Manning. The Cumberland Infirmary, Carlisle, has received £100 under the will of Mr. Joseph Barnes. The Dorset County Hospital, Dorchester, has become entitled to £100 under the will of Mr. John Francis Hodges. The Royal United Hospital, Bath, has become entitled to £100 under the will of Miss M. A. Cross. The Goldsmiths' Company have given £100 to the Surgical Aid Society.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning, at the latest.*

ADAMS, Mr. M. A., has been reappointed Analyst for the County of Kent, for one year.

ANGELL, Mr. A., has been reappointed Analyst for the Borough of Guildford for one year.

ANGIER, G. A., M.D., has been appointed a District Surgeon to the Brighton, Hove, and Preston Provident Dispensary, vice Wooldridge, deceased.

BATTAMS, J. S., M.R.C.S.E., has been appointed House-Surgeon and Dispenser to the Tiverton Infirmary and Dispensary, vice Lillies, resigned.

BATTY, E. L., M.R.C.S.E., L.S.A.L., has been appointed House-Surgeon to the Northern Hospital, Liverpool, vice McGeagh, resigned.

BAYNES, Mr. J., jun., F.C.S., has been appointed Analyst for the Borough of Boston. Remuneration by fees.

BELL, Mr. J. C., has been appointed Analyst for the Borough of Stalybridge.

BLAKE, W. H., M.B., B.Sc., has been appointed Honorary Medical Officer to the St. Albans Hospital and Dispensary.

BLUNT, Mr. T. P., F.C.S., has been appointed Analyst for the County of Merioneth. £1 1s. per analysis. Also reappointed Analyst for the County of Montgomery for one year.

BOULTON, P., M.D., has been appointed Physician for In-patients to the Samaritan Free Hospital, London.

BUTLER, F. W., M.R.C.S.E., L.S.A.L., has been appointed a District Surgeon to the Brighton, Hove, and Preston Provident Dispensary.

CLIBBORN, W., M.D.., L.R.C.S.I., L.M., has been appointed one of the Medical Officers of the Birmingham Lying-in Charity, vice Ravenhill, resigned.

CLOWES, Mr. F., D.Sc. Lond., has been appointed Analyst for the Borough of Newcastle-under-Lyme. £10 10s. per annum and fees.

COLLINS, C. E., L.R.C.P.I., M.R.C.S.E., has been appointed Acting Surgeon to the East Grinstead General Dispensary.

CONNOLLY, W. R., B.A., M.B., L.R.C.S.I., has been appointed Medical Officer to the Lying-in Hospital, Waterford.

COVEY, G., M.R.C.S.E., L.S.A.L., has been appointed Acting Surgeon to the East Grinstead General Dispensary.

CROOK, Mr. W. G., has been reappointed Analyst for the City of Norwich.

DAVISON, S. T., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer of the Carlton District of the Basford Union.

DUNLOP, A., M.D., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Consulting Physician to the Jersey General Dispensary, vice Bull, deceased.

DUSTAN, H., M.R.C.S.E., L.S.A.L., has been appointed Honorary Medical Officer to the Jersey General Dispensary.

EDWARDS, F. S., F.R.C.S.E., has been elected an Assistant to the West London Hospital, vice Butlin, resigned.

FORBES, D., M.B., L.R.C.S.Ed., has been appointed Assistant Medical Officer at the Brownlow-hill Workhouse, Liverpool.

HARDY, H. I. P., M.R.C.S.E., L.S.A.L., has been appointed House-Physician to the London Hospital, vice Lawton, whose time has expired.

HARVEY, Mr. S., has been appointed Analyst for the Borough of Sandwich until Nov. 9th next. Remuneration by fees.

IVENS, A. S., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer of the Eighth District of the Tendring Union, vice Hayman, resigned.

JONES, S., M.B., has been appointed Honorary Consulting Surgeon to the Beckenham Cottage Hospital.

LOVELESS, W. K., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Stockbridge District and the Workhouse of the Stockbridge Union.

MACKESY, G. I., A.B., M.B., L.R.C.S.I., has been appointed Medical Officer to the Lying-in Hospital, Waterford.

MCNEILL, J. C., M.D., has been appointed Honorary Physician to the Tiverton Infirmary and Dispensary.

MCRITCHIE, D., M.B. &c., has been appointed Honorary Surgeon to the Huntingdon County Hospital, vice Davies, resigned.

MAGRATH, J., M.D., M.R.C.S.E., has been appointed Acting Physician to the East Grinstead General Dispensary.

MYLES, G. H., L.A.H.D., has been appointed Resident Apothecary to the Hospital for Incurables, Dublin.

NAPIER, Mr. J., F.C.S., has been appointed Analyst for the Eastern Division of the County of Suffolk. 10s. 6d. per analysis.

PENRUDDOCKE, C., M.R.C.S.E., has been appointed Assistant-Surgeon to the Tewkesbury Rural Hospital.

REDWOOD, Dr. T., has been reappointed Analyst for one year for that part of Middlesex beyond the limits of the Metropolis.

REED, W. H., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Donhead District of the Tisbury Union, vice Bey, resigned.

RICE, G., L.R.C.P.Ed., M.R.C.S.E., has been appointed Medical Officer of the North District of the Derby Union, vice Copestake, resigned.

ROBBINS, J., M.B., C.M., has been appointed House-Surgeon to the Richmond Hospital, vice Gadsby, resigned.

SHEARS, C. H. B., M.R.C.S.E., L.R.C.P.L., has been appointed Assistant House-Surgeon to the Northern Hospital, Liverpool, vice Batty, promoted.

SHIELS, R., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer of the Micheldever District of the New Winchester Union, vice Willis, resigned.

SMITH, J. S., M.D., has been appointed Honorary Physician to the Tiverton Infirmary and Dispensary.

STATHERS, G. N., M.R.C.S.E., L.R.C.P.Ed., & L.M., has been appointed House-Surgeon to the Burton-on-Trent Infirmary.

STEELE, W. C., M.R.C.S.E., L.S.A.L., L.R.C.P.E., has been appointed House-Surgeon to the Huntingdon County Hospital, vice McRitchie.

STILWELL, R. R., M.D., has been appointed Honorary Consulting Medical Officer to the Beckenham Cottage Hospital.

STURGES, M. J., M.D., has been appointed Honorary Medical Officer to the Beckenham Cottage Hospital.

TORRANCE, R., L.R.C.S.Ed., has been appointed Consulting Surgeon to the Throat and Ear Infirmary, Saville-row, Newcastle-on-Tyne.

WILKIN, J. F., M.D., has been appointed Honorary Medical Officer to the Beckenham Cottage Hospital.

WITZ, J. F., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Kiburn District of the Thirsk Union, vice Smith, resigned.

Births, Marriages, and Deaths.

BIRTHS.

BOOTH.—On the 24th ult., at The Beeches, Farnworth, the wife of J. B. Booth, M.R.C.S.E., L.R.C.P.Ed., of a son.

CLAY.—On the 26th ult., at Plymouth, the wife of R. H. Clay, M.D., of a daughter.

DE BRENT.—On the 29th ult., at Church House, Aveley, Essex, the wife of Mortimer de Brent, M.R.C.S.E., L.S.A.L., of a son.

ILIFFE.—On the 27th ult., the wife of Walter Iliffe, F.R.C.S.Ed., of a daughter.

MOSSE.—On the 16th January, at Mona, Jamaica, the wife of Deputy Surgeon-General Charles B. Mosse, C.B., of a son.

PRINGLE.—On the 20th ult., at Angelton, Bridgend, the wife of H. T. Pringle, M.D., Medical Superintendent of the Glamorgan County Asylum, of a son.

RAPER.—On the 18th ult., at Great Wakering, Essex, the wife of W. A. Raper, M.D., of a son.

MARRIAGES.

GRAHAM—THOMSON.—On the 25th ult., at Garry Cottage, Kinnoull, Perth, John T. Graham, M.D., M.R.C.S.E., to Anina, only daughter of William Thomson, Esq.

TURBERVILLE—ADAMS.—On the 24th ult., at St. Andrew's, Bath, William Turberville, M.B., second son of the late Captain Edmund Buckle, Bengal Artillery, to Fannie Ada, widow of James D. Adams, Esq., and only daughter of the late Richard Ashe, Esq., of Coolehane, Cork.

DEATHS.

DUKE.—On the 3rd inst., at his father's residence, 321, Clapham-road, Herbert Duke, M.B., seventh son of Thomas Oliver Duke, aged 26.

DUNLOP.—On the 27th ult., at Aberdeen, Andrew Vans Dunlop, M.D., of Rutland-square, Edinburgh.

EDDIE.—On the 21st ult., at Barton-on-Humber, William Hesleden Eddie, M.R.C.S.E., L.S.A.L., Justice of the Peace for the County of Lincoln, aged 68.

FIDDES.—On the 25th ult., at Union-street, Aberdeen, David Fiddes, M.D.

SCOTT.—On the 22nd ult., at Marsh Gate, Richmond (of pneumonia), Robert Scott, L.S.A.L.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, March 4th, 1880.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb	Solar Radiation in Vacuo	Max. Temp Shade	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Feb. 27	29·91	N.W.	40	38	..	50	36	..	Overcast
,, 28	29·51	S.W.	47	46	..	54	38	0·02	Overcast
,, 29	29·61	S.W.	47	45	..	55	42	..	Cloudy
Mar. 1	29·47	S.W.	49	47	..	55	43	0·12	Cloudy
,, 2	29·40	S.W.	45	43	..	54	37	0·17	Cloudy
,, 3	29·31	S.W.	52	48	..	55	42	..	Cloudy
,, 4	29·78	W.	48	45	..	50	45	..	Fine

Notes, Short Comments, and Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Local papers containing reports or news-paragraphs should be marked.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

Lectures, original articles, and reports should be written on one side only of the paper.

We cannot prescribe, or recommend practitioners.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

HINTS FOR THE HUNTING FIELD.

IF we may be pardoned a solecism, clinical studies may be pursued, and medical men are, unhappily too often, found to be well placed, in the hunting field. Among the hints which practitioners in this department would be inclined to offer their fellow-riders are the three following. They are simple enough, but relate to points sometimes overlooked:—Take care when hunting to grip your horse with the side of the leg as well as the inside of the knee, so that *all* the muscles concerned in this act shall be brought into play, and permitted to relieve each other. A grip by the inner side of the knee only may seem to suffice for a short ride; but going across country a long time at a stretch, it is impossible a really safe seat can be thus maintained. Prepare to fall easily, as instinct teaches the practised rider; but take the precaution before starting to see that the foot does not penetrate the iron of the stirrup so far as to become fixed and jammed by the instep, or caught between the waist and heel of the boot. The boots themselves should be so "easy," while fitting closely, that the foot may be readily withdrawn if caught by the stirrup, leaving the boot in its entanglement. To minimise the chances of a fall, avoid compressing the thorax of your horse by girths so tight that he cannot take a full inspiration before leaping. There is reason to believe that many a horse which would otherwise go well over his fences is hampered by the pressure of girths which do not allow for the necessary expansion of a forced inspiration. There are two perils incident to this mistake—first, the lungs may not be properly filled, and there will be a refusal or a check in the leap and a short jump, and the girths, if not very strong, may be broken.

Enquirer.—Yes, under certain conditions which may be ascertained from the Secretary of the College. We believe the examinations are suspended for the present.

Inquirer, (St. Albans.)—We are not acquainted with an institution of the kind named.

Mr. Palliser.—Thanks. The announcement has already appeared.

THE COPLAND FUND.

To the Editor of THE LANCET.

SIR,—In closing the above Fund, I beg to state that the whole sum collected amounted to £101 5s., which I have handed over to Mrs. Copland, and I am desired, on the part of the Committee, to thank the subscribers and the Editor of THE LANCET for their kind assistance.

I remain, Sir, yours truly,

R. H. SEMPLE, M.D.,
Torrington-square, March 1st, 1880. Treasurer of the Fund.

HORSEFLESH AS FOOD IN IRELAND.

ON lit dans *l'Abeille Médicale*:—"Les journaux font connaître chaque jour les détails navrants des misères endurées par la population irlandaise. Dimanche, 15 février, une quête a été faite dans toutes les églises de Paris, pour lui venir en aide, comme elle nous est venue en aide pendant la dernière guerre. Mais c'est moins l'argent qui manque que les aliments; en temps de famine, l'argent n'a pas diminué, ce sont les aliments qui font défaut. Je rappelle donc qu'en Angleterre et en Irlande, pendant que des milliers d'hommes sont affamés, on laisse encore perdre des millions de kilog. de viande de cheval. Ne se trouvera-t-il donc pas, dans ces contrées, un philanthrope pour attaquer le préjugé qui existe encore contre l'hippophagie? L'exemple de ce qui se passe à Paris devrait pourtant ouvrir les yeux de nos voisins: pendant l'année 1879 on a livré à la consommation, dans la capitale, 10,281 chevaux, 529 ânes et 26 mulets, qui ont donné 2,067,850 kilog. de viande, non compris le cœur, la langue, le foie, etc. Il y avait au 1er janvier de cette année, 73 boucheries à Paris et dans la banlieue. (Pour les renseignements, écrire à M. Decroix, secrétaire général du Comité de la Viande de Cheval, rue Saint Benoît, 5, Paris)."

A Metropolitan Teacher.—The vacancies in the Board of Examiners of the College of Surgeons have not yet been filled up.

Public Officer's letter shall appear next week.

"STREET MUSIC."

To the Editor of THE LANCET.

SIR,—Under this heading a letter appears in your columns of to-day to encourage members of the medical profession to add their names to the list of those whose aim is to abolish or regulate street music in large towns, and by so doing "the profession will come forward to assist the suffering."

The question suggests itself to me—Who are "the suffering" who call forth pity, and who require the assistance of the profession? Are they the sick poor who crowd the wards of charitable institutions in large towns, or who too often drag on their miserable existence in dirty, ill-ventilated, over-crowded, and poverty-stricken homes in the numerous courts and alleys of London and all manufacturing towns? Or are they represented by a small faction of irritable beings, whose home comforts and surroundings are such that they can afford to oppose anything in the least degree hurtful to their sensitive natures? To such a class, perhaps, the fact may never have occurred that the majority in a large population are poor, and these, from lack of educational advantages, have no means of opposing the objects of the Society alluded to by your correspondent, which has for its aim the abolition of one of those few blessings which serve to brighten for a time their unenviable surroundings.

It appears to me that, before any steps are taken for this object, the poor should be allowed to express their views. They have none of those musical advantages to be met with in the homes of the rich. Their musical tastes differ, too, materially from those of their more fortunate neighbours; but yet the poor *are* musical, and the refining influence of this art—although acting upon them through the medium of the rudest of street instruments—should not be denied them.

Anyone who has had the opportunity of observing the effect of a sudden outbreak of music, whether such be produced by a street organ or German band, upon a ward full of sick patients, or upon a group of the more unfortunate of our fellow-creatures who crowd our large asylums, or whether the observer has been district or dispensary surgeon, spending much time amongst the poor,—such a one cannot fail to have noticed repeatedly the moral, not to say therapeutical, value of music. By the influence of this so-called "nuisance" sorrow is often drowned, pain eased, and happiness and contentment take the place of misery and despair.

Perhaps I may be considered sentimental by some in introducing a defence in the cause of music, but I do so without entering here upon its mental, moral, and social advantages, to support an art insufficiently valued by Englishmen. I do not, for one moment, regard the style or rendering of the music produced by organ grinders, or by our so-called German bands, as pleasing to the ears of refined society, but it is, nevertheless, welcomed by the million, whose tastes differ from those of Dr. Bridges, or of the President, and supporters of its abolition.

As a member of the medical profession, and as a lover of music, I trust that these few lines of mine may find a place in your columns to encourage others, before signing a protest, to consider the value of so ancient an art, before supporting a cause which is to diminish its influence in this country. Let us endeavour to promote, rather than discourage musical interests; and, in so doing, we must not altogether disregard the tastes of the community which mainly represents the nation.

I am, Sir, yours faithfully,

Brownhills, Feb. 28th, 1880. G. HERBERT LILLEY, M.D.

THE VINE-PEST.

THE German Government appear to be making strenuous exertions to get rid of the Phylloxera vastatrix, which has been committing sad ravages in the wine-growing districts. To this end, directions have been given that all vineyards and nursery gardens from which vines are sold for planting should be subject to annual inspection by experts with a view to the gradual extermination of the pest.

PUBLIC WORKS AT HYÈRES.

THE municipality of Hyères have just obtained permission to issue a loan for a million and a half francs. Unfortunately this sum is to be expended in embellishing the external appearance of the town, instead of improving the sanitary condition of this one of the most favoured spots on the Riviera. For some years to come, at least, Hyères will remain not a pleasant resort, but a town where invalids take serious care of their health. The advantages of the climate, which are exceptionally favourable even for the Riviera, and the presence of Dr. Griffith, one of the most experienced practitioners in the South of France, all tends to confirm our opinion that the medical, and not the social, is the most important aspect of this town. For two thousand years it has maintained its renown as a health-resort, and all its resources should first be devoted to the sanitary exigencies which are becoming more and more pressing. Out of the £60,000 loan, however, £4380 are to be spent on a new cemetery, and £880 on repairing the water conduits and canals. This is all! New boulevards, gardens, roads, a casino—these are to absorb the newly-secured capital.

Messrs. Allen and Hanburys.—The publication of our correspondents' interesting letter is rendered unnecessary by the appearance in our present number of Drs. Ringer and Murrell's article on the drug.

An Old Subscriber, (Brussels.) — Yes. Twenty-five guineas. Trübner and Co.

W. F.—Not if the structure of the skin is destroyed.

EFFECTS OF TOBACCO.

To the Editor of THE LANCET.

SIR,—Seeing a letter on the subject of "Tobacco-smoking" in your issue of Feb. 7th, I thought perhaps the following case might prove interesting to some of your readers.

In August last I was summoned to a patient, who, as was stated, was in a "fit," with his hands and feet "drawn up." I hurried off at once, for the message had arrived some time previously, and found my patient in bed, from whom and his parents I elicited the following facts: Being distracted with toothache, he was induced to try the introduction of a plug of tobacco, the size of a pea, into the hollow of his painful tooth. In a few minutes he began to experience a strange, indefinable feeling, which gradually resolved itself into a creeping sensation, beginning at the fingers and toes, and extending up the arms and legs until it spread all over the body; and with this creeping there was felt a clammy coldness; then giddiness, with a desire to vomit; cramps in the hands and feet; severe pain in the stomach; panting breathing; swimming in the head; insensibility; sliding to the floor from the couch on which he had been reclining, his head falling back as though lifeless, saliva oozing from his mouth, and breathing now scarcely perceptible. Indeed they began to fear that life was extinct, and in a moment of despair his mother raised his shoulders, which caused him to vomit, the vomit consisting chiefly of bile, and after this he gradually returned to consciousness, though the numbness in his limbs remained for more than an hour. He had a motion and return of the cramps and bilious vomiting during the same night. I may add, my patient is twenty-one, fair, and had never used tobacco before in his life.

The small quantity of tobacco used, the sudden and quick succession of the symptoms as above enumerated, and the utter prostration are points worth noting. Had it not been for his mother raising his shoulders, and so causing him to vomit, I believe that death would have ensued, and we might have been seeking a widely different cause for the same, as it was not until after my patient had recovered that anyone knew of his having used the tobacco.

I am, Sir, yours truly,

Hull, Feb. 10th, 1880. FRED. R. CHAPMAN, M.B. & M.S.

IMPROVED LABELS.

A CORRESPONDENT, "Assistant," makes a good suggestion, to the effect that the example lately set by the Post-office might be followed by manufacturers of labels, and that the good qualities as to texture, adhesiveness, &c., which are so manifest in the new postage stamps, might with great advantage be given to labels, the sticking of which upon medicine bottles is at present a labour of sorrow.

Volunteer.—The rank of medical officers of volunteer corps is that of surgeon. If more than one is attached to a corps, the second has the rank of acting surgeon only. Corps not entitled to a medical officer of substantive rank will be allowed a medical officer with the rank of acting surgeon. See War Office Circular, 25th October, 1877. The duties in camp will be found in the Army Medical Regulations.

Subscriber.—Either is good, and we are not prepared to say which is the better.

CORNS.

To the Editor of THE LANCET.

SIR,—Will those readers of THE LANCET who take an interest in the subject of corns say how it is possible to destroy the vitality that may be lurking in the subjacent structure of a corn after it has been extracted, and also what are the best means of eradicating them without the aid of a knife?

Yours &c.,

Feb. 23rd, 1880. CHIROPODIST.

"HEALTH AND DRESS."

DR. B. W. RICHARDSON has just delivered one of his popular lectures at the London Institution, the subject chosen on this occasion being "Health in relation to Dress." It is needless to say that on such a topic this able and experienced physician had much advice to give which was not only useful in itself, but sufficiently novel to awaken more than a passing interest. We are glad to note that Dr. Richardson approves the suggestion we recently made with regard to the wearing of bright and light colours in winter. Our recommendations have been challenged in other quarters; but we adhere to them, and must be excused for cherishing a lingering regard for the opinions and experiments of Faraday, though these have been "reversed" by the researches of certain more modern lights.

Devonshire should consult a solicitor. The question is a purely legal one.

L.R.C.P.—The question has, we think, been sufficiently discussed.

COUGH PRODUCED BY ACCUMULATIONS IN THE EAR.

To the Editor of THE LANCET.

SIR,—The following case, though similar to one recorded by Mr. Rudd Leeson, may prove of interest and possibly of use to some of your professional readers.

The patient, a singularly robust young lady, consulted me in regard to a cough of some three years' standing. The cough was loud, incessant, and peculiarly "hollow." It was dry, unaffected by times of day, seasons, or weather. It deprived her often of rest at night, and rendered her a source of annoyance and anxiety to her friends. She had consulted various medical men, and had taken almost every conceivable patent medicine, including some powerful sedatives, without obtaining even slight relief. The heart and lungs proved, as I had expected, to be healthy. The functions of the uterine, gastro-intestinal, and renal systems were stated to be strictly normal. There were no symptoms indicative of the presence of entozoa. The condition of the throat was natural; there was no relaxation of the uvula. I had come to the conclusion that the cough must be of an hysterical nature, when it occurred to me to examine the ears. The left membrana tympani was plainly visible and healthy. The state of the right one was hidden by a dark mass. On touching this mass with a probe through the speculum, the patient's peculiar cough was immediately produced, and, by keeping up a very slight, steady pressure on it, a fit of coughing, not unlike a violent paroxysm in whooping-cough, resulted. By the aid of a large ear-syringe and a weak hot alkaline solution, a piece of hard wax, *fons et origo mali*, was with some difficulty produced. It weighed over three grains. I followed up the syringing by the use of Politzer's apparatus. The cough ceased, and, though some weeks have now elapsed, it shows no sign of returning.

The above case is, I think, instructive, as tending to show that accumulations of wax &c. in the ears, sufficient to produce violent cough, may not betray their existence by the tinnitus aurium, giddiness, &c., which we are so apt to associate with their presence.

I am, Sir, yours faithfully,

Barking-road, E., Feb. 24th, 1880. A. E. BRIDGER, M.B. Edin.

SUPERANNUATION OF POOR-LAW MEDICAL OFFICERS.

Mr. Wickham Barnes asks us to publish the following reply to a letter directed by the Council of the Poor-law Medical Officers' Association to the Local Government Board:—

"Inquiry having been made of the guardians of the —— Union respecting the case of ——, formerly medical officer of that union, the guardians have explained that they entertain objection to the system of superannuation, especially in cases where the whole time of the officer is not devoted to the duties of the office. As the Council are probably aware, the initiative in these cases rests with the guardians, and the Board have no power to insist upon a superannuation allowance, even where it might seem to them that a proper case for superannuation had been made out."

F.R.C.S. Exam.—Sir James Paget will take the chair at the festival of the Fellows of the College of Surgeons on the evening of the annual election into the Council. Mr. B. T. Lowne, F.R.C.S., is the Honorary Secretary.

"THE NEW INFIRMARY, EDINBURGH."

To the Editor of THE LANCET.

SIR,—Will you kindly allow me to correct an erroneous impression which your correspondent's remarks under this heading, in your issue of February 21st, may give rise to?

No instance of all the septic cases in one ward taking erysipelatous action has occurred here. Out of 778 patients admitted to the surgical wards up to February 21st, twelve have subsequently been affected with erysipelas; one other case suffered from it on admission. Two of the twelve were antiseptic cases, in one the face being affected, the wound (in the thigh) not participating; in the other the carbolic dressing had been left off when the wound became superficial, and it was being dressed daily with boracic lotion when it was twice affected with erysipelas. Of the "septic" cases, in two at least the wound remained healthy, and in two, if not more, the patients had been subject to frequent attacks previously.—I am, Sir, yours &c.,

ROBT. ROBERTSON,

March 1st, 1880. Resident Surgeon, New Royal Infirmary.

EXTRAORDINARY CASE OF SUPERFŒTATION IN THE COW.

MR. RICHMOND KEELE, of Hanger-hill, Ealing, states, in the *Veterinary Journal* for March, the following extraordinary case:—"I have a cow that, on August 9th last, had a heifer calf, apparently at full time; indeed, so fine a one that I am rearing it. The cow milked well for about a month, and then suddenly lessened the quantity, and shortly ceased to give any. On September 26th she took the bull, and from that time I noticed nothing unusual with her, though constantly seeing her, until December 24th, when she had another calf, a bull, strong and full-sized, and certainly not premature. The calf is now alive and doing well, and the mother is giving as much milk as after any of her previous calvings."

M.D., (Madras.)—Surgeon-General Sir Joseph Fayrer, K.C.S.I., is the President of the Indian Medical Board.

Student.—One of the effects traceable to the cause we alleged.

NITRITE OF AMYL IN SEA-SICKNESS.

To the Editor of THE LANCET.

SIR,—It was only yesterday I became aware that my letter to you on the above subject, in your issue of August 2nd last year, had roused the ire of Drs. Bradburn and Potter. Had these gentlemen read my communication a little more carefully, they would have seen that I avoid giving an opinion upon the case I describe. I wrote decrying the indiscriminate use of the drug, and mentioned, as a minor matter quite, my "experience" in the treatment of one case. The result of my treatment struck me as being peculiar, and gave rise to conjecture and inquiry, not, as our friends seem to think, to utter condemnation of the remedy. Thus, in the belief that each capsule contained an overdose, I ask, "Was an overdose the cause of the vomiting?" And, knowing that the effect produced is only temporary, "Is it advisable to continue the use of it two or three times a day?" Dr. Potter says "Surely not." I, on the other hand, do not know. *My* experience is limited. Will anyone inform me who has tried three or four doses a day? The opinion I express, that "for my part I would rather get over my day or two of occasional vomiting without the remedy," on account, as I state, of its disagreeable effects, is turned by our friend into a conclusion from the knowledge that its effects are only temporary. Now, I am not aware that temporary has ever been considered synonymous with disagreeable.

Although Dr. Bradburn has also had the misfortune to misunderstand the purport of my epistle, I am pleased to observe that he has had the good sense to concur in my opinion that all healthy young people require neither nitrite of amyl nor any other drug to allay sea-sickness.

I am, Sir, yours faithfully,

Pretoria, Transvaal, Jan. 9th, 1880. C. R. ILLINGWORTH, M.B.

DR. CROWLEY AND THE VACCINATION ACTS.

WE deeply sympathise with Dr. Crowley in his indignation at being summoned as an anti-vaccinationist. The administrators of the Vaccination Act should be better advised than to prosecute those who are enthusiastic advocates of vaccination.

Dr. Stephen Mackenzie.—The paper has been received, and will be inserted in an early number.

W. M. M.—We know nothing of the matter.

Mr. Appleby.—Robbins and Co., 372, Oxford-street.

THE EFFECT OF SALICYLATE OF SODA ON THE HEART.

To the Editor of THE LANCET.

SIR,—There has been some discussion in THE LANCET as to the effect of salicylate of soda on the heart-sounds in acute rheumatism. Would you permit me to call attention to the presumption that it will have exactly the same effect on a healthy heart whether its possessor be suffering from rheumatic fever or not? Some accurate observations on the physiological effects of salicylate of soda on the heart would be most useful to the physician, and that it has a powerful influence over that organ, either directly or indirectly, I feel sure from personal experience.

So far as I have been able to observe the heart in rheumatic fever, I believe that it is always affected, that it suffers first, and that the symptoms of its affection in the majority of cases pass off during the first week. If the seat of mischief be pericardial, the symptoms can hardly be overlooked; but when the lesion is endocardial, the disturbance of the pitch, rhythm, and duration of the sounds may be marked without any other symptom than a slight tightness across the chest, the existence of which is seldom spontaneously complained of, or liability to palpitation on exertion or excitement. Sufficient mischief may exist in many cases to give rise to a murmur without the slightest symptom of any cardiac complication. If my observations are correct as to the state of the heart in rheumatic fever, how difficult it must be to determine to what extent any drug affects the first sound of the heart in that disease.

I am, Sir, yours &c.,

Manchester, Feb. 14th, 1880. JOHN HADDON, M.D.

Justitia.—The case seems to be one which might be taken up by the Association named.

Dr. Strange's letter shall appear next week.

Dr. Boyle.—We do not think the case can be regarded as an "extra."

DOMESTIC LIGHTING.

THE *Electrician* quotes a French paper to the effect that Dr. Phipson has succeeded to a considerable extent in solving the question of economical lighting of dwellings. This is accomplished by increasing, by a weak electric current, the phosphorescence of certain substances influenced by the solar rays. For example, sulphide of barium is enclosed within a Geissler tube, through which a constant current of a given intensity is made to pass. By this means, it is asserted, a uniform and agreeable light may be obtained at a cost less than that of gas.

W.—We cannot prescribe or express an opinion.

SANITARY CONDITION OF DUBLIN: THE RIVER LIFFEY.

To the Editor of THE LANCET.

SIR,—It appears from the public press that the Dublin Corporation have completed a contract with a Glasgow firm for the construction of sewers to the amount of £50,000. It is not creditable to the Dublin traders that this contract should be taken by a Scotch firm; but I have no doubt that the work will be better done than that which has hitherto been carried out under the inspection of the Corporation "surveyors." It is to be hoped that something will be done to remedy the pestilential nuisance of the Liffey. As the city of Dublin is but four or five miles from the open sea or bay, the removal of the nuisance is of easy accomplishment, the tide running at the rate of two or three miles per hour, carrying the refuse matters to sea in about two hours. The bed of the river, however, contains numerous hollows, in which the sewage matter is allowed to collect and putrefy. The bed of the Liffey should be paved, and a dwarf embankment raised on each side, so as to form a perfect channel for the escape of all refuse matters. As the length of the river requiring this does not exceed 2000 yards, the work might be done for a few thousand pounds. The Dublin Corporation have been for years endeavouring to obtain a sum of £500,000 to be expended on draining not only the city of Dublin, but also the adjoining suburbs of Rathmines, Rathgar, Pembroke, &c., and have neglected an advantage to be easily gained in the pursuit of an *ignis fatuus*.

I remain, Sir, yours truly,

Feb. 23rd, 1880. ALPHA.

W. T. S. will probably find the information he needs in Dr. Ireland's book on "Idiocy." An ophthalmoscopic examination may throw some light on the case.

Alpha.—1. Yes. 2. Dr. F. E. Pocock, 20, Golborne-road, Upper Westbourne-park, W., is the secretary.

CARDIAC COMPLICATION IN ACUTE RHEUMATISM.

To the Editor of THE LANCET.

SIR,—In connexion with the discussion at present going on in regard to the therapeutics of acute rheumatism, allow me to point out an apparent fallacy in the statistics which are being produced. In these we find statements of so many patients discharged cured in ten or twelve days. Considering that, at least, endocarditis often cannot be diagnosed at its commencement, it is rash to pronounce a sufferer of rheumatic fever cured after a few days of illness, when he may possibly be the subject of a disease which, though latent at first in its effects and developing slowly, will, however, sooner or later manifest itself by unmistakable signs and symptoms. Before the merits of drugs in preventing cardiac complication of the disease can be properly appreciated, cases which appear to be quite well in a few days must be watched for longer periods than has hitherto been the case, and statistics must be forthcoming based on results thus obtained. Then we may expect to have more reliable data; for the cases of cardiac mischief at present recorded can be only those where the lesion, on account of its situation &c., has given rise to effects by which it has been at once diagnosed.

I am, Sir, yours faithfully,

Wrexham Infirmary, Feb. 24th, 1880. J. T. R. DAVISON, M.B.

Science.—Medical evidence should be regarded as indispensable at any inquest in a case of death from an unknown cause.

Mr. W. H. Coates will find an example printed on page 750 of THE LANCET for Nov. 15th, 1879.

SERIOUS COLLAPSE FROM CHLORAL AND BROMIDE OF POTASSIUM COMBINED WITH OPIUM.

To the Editor of THE LANCET.

SIR,—The ill-effects of a combination of chloral hydrate and bromide of potassium, followed by a dose of opium, are not so generally known as one would wish. The administration of chloral hydrate and bromide of potassium together, as everyone knows, forms a useful sedative; but if followed a few hours after with a dose of opium, very grave symptoms of collapse will supervene. More than one case has come under my notice. I remember one case in particular of a fine young fellow who was taking bromide and chloral; but, being very noisy, opium was ordered. Within an hour he became collapsed and died. At the time it did not occur to me that the combined drugs caused this serious state of affairs. Since this case others have come under my notice, and very lately I have heard of two cases that have terminated fatally. Hence my letter.

Yours faithfully,

PETER W. DE LA MOTTE,
Medical Officer, West London District School.

Staines, Feb. 16th, 1880.

BEST COPY AVAILABLE

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LETTERS, *each with enclosure*, are also acknowledged from—Mr. Cowland, Launceston; Mr. Grace, Newcastle-on-Tyne; Mrs. Rahn, Ipswich; Mr. Maguire, Stony Stratford; Mr. Hiller, Leighton; Dr. Satherland, Fence Houses; Dr. Wilson, Old Meldrum; Mrs. Spence, Glasgow; Mr. Newland, Lewes; Mr. Shaw, Salford; Mr. Slingsby, London; Mr. Chute, Port Elizabeth; Mr. Arrowsmith, Bristol; Mr. Swinhoe, New Swindon; Dr. Arnold, Yardley-Hastings; Mr. Williams, Bath; Dr. M'Farley, Reading; Mr. Hallas, Halifax; Mr. Chestnutt, Tralee; Mr. Brown, Rochdale; Mr. Crackle, Ilkeston; Mr. Newman, London; Messrs. Lee and Nightingale, Liverpool; Dr. Wallace, Cardiff; Mr. Stack, Omagh; Messrs. Grace and Co., Bristol; Mr. Broombead, Aberdeen; Messrs. Evans and Co., Wrexham; Mr. Dickson, Caragany; Dr. Woodroffe, Bournemouth; Dr. Bastable, Blackburn; Dr. Walker, Cheltenham; Dr. Moore, Jersey; Messrs. Dawson Brothers, Montreal; Dr. Fraine; Mr. Smith, Worthing; Mr. Burwell, Bawtry; Colonel R., Kensington; O. A. W., Hastings; Hermes; W. V. W.; F.R.C.S., Blakeney; H. C., Salford; Cowell, Oldham; W. W., Twickenham; W. G., Stratford; B.; Charles, Edinburgh; F. D., Peckham; E. A., Colchester; T. J. H., Barnsley; Mecca; M.R.C.S., Atherston; Omega; A. B. C. and X. Y. Z.; W. F. J.; &c.

Journal of Trinity College (London), Estates Roll, Record, American Wine and Grape-grower, Boston Medical and Surgical Journal, Lloyd's Weekly News, Chelmsford Chronicle, Western Morning News, Holborn Guardian, Metropolitan, Manchester Guardian, Surrey Advertiser, Birmingham Daily News, Sussex Express, Chicago Daily Tribune, Brighton Guardian, Malta Times, Provisioner, Pharmaceutical Journal, &c. &c., have been received.

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Medical Diary for the ensuing Week.

Monday, March 8.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS. — Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day, and at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
ST. MARK'S HOSPITAL.—Operations, 2 P.M.; on Tuesday, 9 A.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Flower, "On the Comparative Anatomy of Man."
MEDICAL SOCIETY OF LONDON.—8½ P.M. 107th Anniversary.

Tuesday, March 9.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION.—3 P.M. Professor Schäfer, "On the Physiology of Muscle."
ROYAL MEDICAL AND CHIRURGICAL SOCIETY.—8½ P.M. Mr. Arthur E. Barker, "On Nephrectomy by Abdominal Section."

Wednesday, March 10.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL. — Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL. — Operations, 1½ P.M., and on Saturday at the same hour.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL. — Operations, 2 P.M., and on Saturday at 1 P.M.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL. — Operations, 2 P.M., and on Saturday at the same hour.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN. — Operations, 2½ P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Flower, "On the Comparative Anatomy of Man."
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Croonian Lectures: Dr. Cayley, "On some Points in the Pathology and Treatment of Typhoid Fever."
HUNTERIAN SOCIETY.—7½ P.M. Council Meeting.—8 P.M. Dr. F. Warner, "On a Case of Athetosis, associated with Epilepsy."—Mr. J. Startin, "On a Case of Elephantiasis."—Dr. Carrington, "On Cancer of the Bile duct; Fatal by Suppuration of the Liver."
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Professor M. Duncan, "On a Sponge Parasitic within Carpenteria Raphidodendron."—Professor E. Abbe, "On the Functions of Angular Aperture."—Dr. H. Gibbes, "On Double and Treble Staining of Animal Tissues."—M. A. Nachet, "On a Petrographical Microscope."—Mr. J. Badcock, "On Podophrya Quadripartita."

Thursday, March 11.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—1½ P.M. Surgical Consultations.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL. — Operations, 2 P.M., and on Friday at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M.
ROYAL INSTITUTION. — 3 P.M. Professor Dewar, "On recent Chemical Progress."

Friday, March 12.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 2 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL COLLEGE OF SURGEONS OF ENGLAND.—4 P.M. Professor Flower, "On the Comparative Anatomy of Man."
ROYAL COLLEGE OF PHYSICIANS OF LONDON.—5 P.M. Lumleian Lectures: Dr. W. Roberts: "Researches on the Digestive Ferments and the Preparation and Use of Artificially Digested Food."
QUEKETT MICROSCOPICAL CLUB.—7 P.M. Conversation and Exhibition of Objects.
ROYAL INSTITUTION.—8 P.M. Evening Meeting.—9 P.M. Dr. C. William Siemens, "On the Dynamo-electric Current and some of its Applications."
CLINICAL SOCIETY OF LONDON. — 8½ P.M. Mr. Eve, "On a Case of Impacted Fish-bone in the Œsophagus, penetrating the Diaphragm and Pericardium, and Wounding the Heart."—Dr. Greenhow, "On a Case of Typhoid Fever, associated with Acute Nephritis and profuse Hæmaturia, without Dropsy."—Dr. Buzzard, "On a Case of rapid and almost universal Paralysis, involving the four Extremities, both sides of the Face, Respiration, and Deglutition; Recovery."—Mr. Eve, "On a Case of Fracture extending through the Temporal Bone."—Mr. Clutton, "On a Case of Femoral Aneurism; Ligature of the External Iliac Artery; Recovery."—Dr. Crocker will exhibit a Case of "Herpes Iris."

Saturday, March 13.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. Saintsbury: "Dryden and his Period."

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